The atmosphere affects people in a number of ways. Blizzards snarl transportation and affect utilities. Floods threaten life and infrastructure. Droughts reduce agricultural production, and heat waves cause the demand for electricity to spike. Hail and high winds damage property and increase insurance rates. Even sunshine can increase the formation of haze and smog. In addition, climate change may alter the severity and location of all these events. Understanding the processes that cause these weather events is critical in our daily lives as well as in industry. Ohio State’s atmospheric sciences major provides students with the knowledge and skills to excel in a wide variety of professional endeavors.

Pursuing Atmospheric Sciences at Ohio State
All freshman applicants to the Columbus campus are considered within a competitive admission process; find admissions criteria at go.osu.edu/admissions. Students admitted to the university enroll directly in the atmospheric sciences program.

The Department of Geography offers undergraduates pursuing atmospheric sciences the following resources:

- Eight full-time tenure-track faculty who are well respected in the fields of atmospheric and related sciences and who are easily accessible to students for course-related issues, career advice and research opportunities.
- Computer labs for teaching and research, the Synoptic Meteorology Laboratory (home to the Meteorology Club), and a collection of instruments for field research and teaching that offers students hands-on experience with data collection and analysis.
- Twister, the Ohio State University Weather Server, provides real-time meteorological data for educational and informational uses (visit twister.sbs.ohio-state.edu for more information). Many official meteorological websites, including the National Hurricane Center, maintain links to Twister.

Co-Curricular Opportunities
Ohio State offers many opportunities for students to learn and grow outside of the classroom. These range from cooperative education (co-op) and internships to study abroad programs to student organizations. Co-ops and internships place students in professional environments while they are Ohio State students. Ohio State offers more than 100 study abroad programs in 40 countries around the world. In addition, there are hundreds of student organizations on campus to meet the interests of a diverse student population.

These experiences enable students to gain valuable work experience, learn about cultures and take on leadership roles before they enter the workforce. All of these experiences enhance learning and may provide an advantage in the job market.

Honors & Scholars Programs
Ohio State offers the Honors and Scholars programs to create an environment of intellectual support and stimulation within a close-knit community of high-ability undergraduate students. Through these programs, students have access to smaller classes, enhanced undergraduate research opportunities, close working relationships with faculty, priority scheduling and unique housing options.

Honors and Scholars programs represent great opportunities to be part of a smaller community within a large university. Learn more at honors-scholars.osu.edu.

Career Prospects in Atmospheric Sciences
The atmospheric sciences major is tailored specifically to fit the needs of students who want to pursue careers in meteorology. It is organized to provide students a foundation of knowledge and skills so they are well positioned to pursue further education or a career after graduation.

Graduates of the atmospheric sciences major will exceed the entrance requirements of many highly regarded graduate programs. Students who indicate an interest in graduate study will receive advising to help them maximize their opportunities through involvement in internships, summer programs and research projects.

The major also prepares students for a career as a weather forecaster. Graduates will fulfill all of the Federal Civil Service requirements for meteorologist positions and will qualify for meteorology positions in the National Weather Service, the Federal Aviation Administration or any other federal agency.

The atmospheric sciences major also is sufficiently flexible to meet the needs of undergraduates who are interested in careers in broadcast meteorology, climatic research, environmental monitoring, forensic meteorology, applications development and the military.

For more information, check these websites:

Atmospheric Sciences: geography.osu.edu
Arts and Sciences: artsandsciences.osu.edu
Ohio State: osu.edu
Admissions: undergrad.osu.edu
First Year Experience: fye.osu.edu
Multicultural Center: mcc.osu.edu
Curriculum Sample
This is a sample list of classes a student may take to pursue a bachelor’s degree in atmospheric sciences. Since university students need more than specific education in a narrow field, they also will take classes to complete General Education (GE) requirements. Because GE courses come from a variety of academic areas of study, this course work helps students develop fundamental skills essential to collegiate success and allows them to tailor these courses toward their interests. Note: This sample represents one of several possible paths to a degree in atmospheric sciences.

Freshman Year:
- University Survey course 1
- Calculus and Analytic Geometry I and II 10
- Physics 5
- GE courses 15
**Total hours** 31

Sophomore Year:
- Calculus and Analytic Geometry III 4
- Differential Equations and Their Applications 3
- Physics 5
- Basic Meteorology 3
- Synoptic Meteorology Lab 2
- GE courses 9
- Electives 5
**Total hours** 31

Junior Year:
- Atmospheric Thermodynamics 3
- Microclimatology: Boundary Layer Climatology 3
- Synoptic Meteorology: Synoptic Analysis and Forecasting 3
- General Chemistry 5
- Introduction to Statistical Analysis 5
- GE courses 12
**Total hours** 31

Senior Year:
- Microclimatological Measurements 3
- Dynamic Meteorology I and II 6
- Major electives 9
- GE courses 11
- Elective 3
**Total hours** 32

Revised June 2015. Information subject to change. For the most up-to-date information on the atmospheric sciences program, visit geography.osu.edu.

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