Are you a weather geek? Are you interested in climate change and how it will affect industry and daily life? Do you enjoy math and science classes? If you answered yes, consider a degree in Meteorology, the science of the atmosphere. Our program, rich in tradition, was the very first meteorology or atmospheric science degree program offered by a public university in Illinois. In addition to an abundance of hands-on learning opportunities commonly associated with a large research university, you’ll find the personal attention typically associated with a small college, and dedicated faculty committed to mentoring and teaching. All core classes are taught by full-time, award-winning faculty. Class sizes in required courses are small; averaging between 15 and 25, while enrollments in electives courses are typically smaller. Our program meets standards established by the American Meteorological Society for an undergraduate degree in atmospheric science and federal civil service requirements for meteorologists. To properly prepare for career opportunities, you’re required to take a series of math and science courses and encouraged to consult regularly with your adviser in our department.

Beyond Forecasting

There’s more to Meteorology than forecasting and broadcasting! Our program provides an educational foundation and experience that will prepare you for public and private sector careers in applied meteorology, environmental meteorology, weather forecasting, broadcast meteorology and applied climatology, as well as additional graduate education.

Networking with Professionals

The opportunity to network with professionals in the field – many of whom are proud NIU alumni – is a hallmark of our program. You will connect with them throughout your educational journey, from classroom presentations and research activities to student American Meteorological Society (AMS) meetings.

Every fall, the Department hosts Career Day to allow current students to network with alumni while learning first-hand the career options open to students pursuing a Meteorology degree. Those connections are deepened through internship and research activities.

Contact Information

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In Meteorology

Meteorologists study and predict the weather and climate, which impacts lifestyle and the economy. Even more so today, the career opportunities go beyond the traditional forecasting and broadcasting to atmospheric research and teaching.

Meteorologists add value to the decision-making process in the public and private sector, including:

- Government
- Aviation
- Agriculture
- Financial Services/Insurance
- Energy
- Transportation
- Water Resources
- Sporting/Entertainment venues

According to the U.S. Bureau of Labor Statistics, employment of atmospheric scientists is projected to grow 9 percent through 2024, faster than the average for all occupations. The best job prospects for atmospheric scientists will be in private industry.

Requirements outside Department (30-31)

- GEOG 370 Regional Climatology
- GEOG 391 Internship Meteorology/Climatology (1-3 hours)
- GEOG 406 Natural Hazards and Environmental Risk
- CSCI 240 Computer Programming in C++ OR GEOG 495 - Computer Programming for Geospatial and Atmospheric Sciences
- MATH 229 Calculus I
- MATH 230 Calculus II
- MATH 232 Calculus III
- MATH 336 Ordinary Differential Equations
- PHYS 253 Fundamentals of Physics I: Mechanics
- PHYS 273 Fundamentals of Physics II: Electromagnetism
- STAT 200 Elementary Statistics

We encourage you to participate in the following:

Internships

Between our close proximity to Chicago and Rockford and our network of regional weather-sensitive sectors, our program has developed a list of internship options that allow you to consider career options in government or private sector weather forecasting, broadcast journalism, research opportunities and private sector use of weather and climate information in risk management efforts.

Faculty-mentored research (MET 431 and 491) activities

Projects have been presented at the Department and University Research and Artistry Day. Some of these project findings have been published in refereed literature or presented at regional or national conferences.

Student chapter of the American Meteorological Society

Participating is a great way to network with fellow students and professionals in the field! The group meets once or twice a month, brings in external speakers and takes a couple field trips throughout the year.

NIU/NWS Weather Station

A cooperative weather station is located on campus allowing you to take daily weather observations of temperature, precipitation, evaporation and soil temperatures. The weather director develops and disseminates a monthly climate summary.

Northern Television Center (NTC) and Northern Star

You’ll develop and present weather forecasts for our student-led media outlets.

Degree Requirements

Requirements in Department (35)

- GEOG 105 Weather, Climate and You
- GEOG 106 Weather, Climate and You Laboratory
- GEOG 300 Proseminar
- MET 300 Meteorology
- MET 360 Radar Meteorology OR GEOG 360 - Introduction to Remote Sensing
- MET 410 Weather Dynamics I
- MET 411 Weather Dynamics II
- MET 421 Synoptic Meteorology
- MET 444 Mesoscale Meteorology
- MET 475 Practicum in Weather Analysis and Forecasting
- GEOG 408 Tropical Environmental Hazards
- GEOG 460 Remote Sensing of the Environment
- GEOG 461 Applied Statistics in Geographic Research
- GEOG 491 Undergraduate Research in Geography
- GEOG 492 Hydrology
- GEOG 498 Seminar in Current Problems
- MET 291 Field Experience in Meteorology
- MET 430 Micrometeorology
- MET 431 Applications in Climatology
- MET 485 Atmospheric Physics
- MET 491 Undergraduate Research in Meteorology

Course work from the following (6)

- GEOG 370 Regional Climatology
- GEOG 391 Internship Meteorology/Climatology (1-3 hours)
- GEOG 406 Natural Hazards and Environmental Risk
- MATH 229 Calculus I
- MATH 230 Calculus II
- MATH 232 Calculus III
- MATH 336 Ordinary Differential Equations
- PHYS 253 Fundamentals of Physics I: Mechanics
- PHYS 273 Fundamentals of Physics II: Electromagnetism
- STAT 200 Elementary Statistics