# Meteorology, Minor

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Description

Students pursuing the 39-credit Meteorology minor seek to broaden their education by specializing in an applied science. As for Meteorology majors, students minoring in Meteorology and Atmospheric Science must have a strong background in mathematics and physics. Eleven of the 20 Meteorology credits come from the three required courses of METEO 300, METEO 421, and METEO 431. The remaining 9 credits come from 100-, 200-, 300-, or 400-level METEO courses, at least one of which must be at the 400 level. Completion of the three required courses ensures that students will have the foundational atmospheric science material that they need to register for the remaining 9 Meteorology credits. In consultation with a Meteorology adviser, students may choose these elective courses from a variety of subspecialties:

- Air quality studies
- Atmospheric dynamics
- Atmospheric physics
- Climatology
- Computer applications
- Weather analysis and forecasting

## What Is Meteorology?

Meteorology is the study of weather, climate, and the characteristics, structures, and processes of the atmosphere. Broaden your education by seeking a minor in the applied science of meteorology and atmospheric science. The minor often complements majors in physics, chemistry, mathematics, and other fields.

**You Might Like This Program If...**

- You are fascinated with weather, climate, or the environment.
- You are a self-described “weather geek.”
- You enjoy applying mathematics and physics to problems in the atmosphere and oceans.
- You are interested in learning more about meteorology to augment another science or engineering major or career.

## Program Requirements

### Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10. The remaining 9 credits come from 100-, 200-, 300-, or 400-level Meteorology courses, at least one of which must be at the 400 level. Completion of the three required courses ensures that students will have the foundational atmospheric science material that they need to register for the remaining 9 Meteorology credits. In consultation with a Meteorology adviser, students may choose these elective courses from a variety of subspecialties:

- Air quality studies
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### Prescribed Courses

**Prescribed Courses: Require a grade of C or better**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 110</td>
<td>Chemical Principles I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus of Several Variables</td>
<td>2</td>
</tr>
</tbody>
</table>

### Additional Courses

**Additional Courses: Require a grade of C or better**

Select 9 credits (at least 3 credits at the 400 level) of 100-, 200-, 300-, or 400-level Meteorology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 232</td>
<td>Integral Vector Calculus</td>
<td>2</td>
</tr>
<tr>
<td>MATH 251</td>
<td>Ordinary and Partial Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>METEO 300</td>
<td>Fundamentals of Atmospheric Science</td>
<td>4</td>
</tr>
<tr>
<td>METEO 421</td>
<td>Atmospheric Dynamics</td>
<td>4</td>
</tr>
<tr>
<td>METEO 431</td>
<td>Atmospheric Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>General Physics: Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>General Physics: Electricity and Magnetism</td>
<td>4</td>
</tr>
</tbody>
</table>

## Academic Advising

The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of-class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy)

### University Park

**Jon M. Nese**

Associate Head for Undergraduate Programs

518 Walker Building

University Park, PA 16802

814-863-4076

j2n@psu.edu

### Career Paths

This minor can help you learn about meteorology or prepare you for future study or work.

### Careers

The minor provides students with meteorological knowledge for careers in industry, private consulting firms, government, or the armed forces. This minor may benefit students planning careers in environmental consulting, public policy, economic planning, or risk management. Students who wish to be employed full-time as a meteorologist may position themselves to provide services in these areas.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A MINOR IN METEOROLOGY (http://www.met.psu.edu/careers)

### Opportunities for Graduate Studies

A minor in Meteorology, in conjunction with a B.S. in a science or engineering field, may position a student to apply for graduate school in some scientific disciplines, including atmospheric science.
MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES
(http://www.met.psu.edu/prospective-students/graduate-students-ms-
and-phd-degrees)

Contact
University Park
DEPARTMENT OF METEOROLOGY AND ATMOSPHERIC SCIENCE
503 Walker Building
University Park, PA 16802
814-865-0478
meteoundergrad@meteo.psu.edu

http://www.met.psu.edu