

YOUR OPPORTUNITY TO LEAD

The Department of Atmospheric Sciences is committed to offering a comprehensive undergraduate program that educates students in the basics of atmospheric science and prepares them for successful careers. The curriculum includes observational techniques, data analysis and practical application. We also provide numerous experiential learning opportunities.

Why UND Atmospheric Sciences

Many colleges and universities offer an undergraduate degree in Atmospheric Sciences or Meteorology, why should you choose the University of North Dakota?

- **Combined B.S./M.S. Degree**
Earn a Bachelor's degree and Master's degree in only 5 years
- **NWS Forecast Office**
Only one block from campus. Student volunteer program in place
- **Broadcast Studio**
Students produce a daily weather show in our broadcast studio
- **Teaching**
Opportunity to teach an introductory meteorology lab section
- **Research**
Opportunity to work on research grants with faculty
- **Doppler weather radar**
learn about weather radar and collect data
- **Four seasons**
experience a wide variety of weather conditions





FIND YOUR PASSION

Bachelor of Science in Atmospheric Sciences

Prepares students for careers in government, industry and broadcasting. This rigorous program provides a strong foundation in the basic physical sciences, advanced study in atmospheric processes and research opportunities.

Master of Science in Atmospheric Sciences

Serves students seeking advanced knowledge for professional work in the atmospheric sciences as well as those who are interested in continuing graduate studies at the doctoral level.

Doctor of Philosophy in Atmospheric Sciences

Prepares students for leadership roles in academia, government, and private industry in the field of atmospheric sciences.

Combined B.S./M.S. in Atmospheric Sciences

Provides an efficient path to completion of an advanced degree and competitive qualifications for entry into a professional career.





What is a meteorologist?

A meteorologist uses scientific principles to explain, understand, observe, or forecast the earth's atmospheric phenomena and/or how the atmosphere affects the earth and life on the planet. Basically, meteorologists study and predict the weather and climate and its relationship to other environmental processes and the impact on our lives and economy. Meteorologists can have many different jobs including daily weather forecasting, atmospheric research, teaching, broadcasting and supporting clients through private sector meteorological companies.

Research Aircraft

The University of North Dakota utilizes a Cessna Citation II aircraft for the purpose of atmospheric research. This aircraft has the capability to sample winds and turbulence, cloud microphysics, atmospheric chemistry and aerosol, and electric field. Operating altitudes range from near the surface to 13 km.

Weather Radar

The University of North Dakota owns and operates a 5-cm wave length polarimetric Doppler weather radar, dubbed NorthPol. The system is used to support not only departmental research but also hands on classroom learning through radar courses taught in the Atmospheric Science Department.



Weather Broadcasting

Students have opportunities to gain experience in weather broadcasting. The student-run Daily Weather Update creates a weather segment five days a week for broadcast on the Atmospheric Sciences webpage and social media. The show relies on students for content, graphics, and on-air presentation.

Aerosol Robotic NETWORK (AERONET)

AERONET (Aerosol RObotic NETwork) is a worldwide sun-photometer network that provides measurements of aerosol properties for climate and air quality related applications. The UND AERONET station is located at the UND observatory site west of Grand Forks and is used to study local aerosol phenomena as well as long range aerosol plume transports.

UND AMS (American Meteorological Society)

This chapter of the national AMS organization is for all UND students interested in the weather. Activities include community service projects, fundraisers, and social events to foster fellowship between our members.

Thunderstorm Experience Class

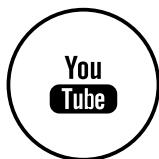
Follow the Storm Chasers class on twitter @UNDchase



UND Aerospace - Dept. Atmospheric Sciences 01/03/2019 17:03:00

FOLLOW OUR SKYCAM

Funded by a number of generous donors during an UND Alumni Association Crowdfunding campaign in 2018, a high-definition camera was installed on top of Clifford Hall. Facing west, it looks across Ryan and Robin Halls. The astute observer can even see the hustle and bustle of air traffic in and out of the Grand Forks Airport! In the short time it has been operational, the camera has witnessed a number of interesting weather phenomena including gravity waves, light pillars, blowing snow, and sun dogs.



[youtube.com/UNDAtmosphericSciences](https://www.youtube.com/UNDAtmosphericSciences)

ATMOSPHERIC SCIENCES BY THE NUMBERS

\$5M

active research

90%+

placement rate

60

students

24

forecasting stations

11

faculty

1

weather broadcast studio

