



# AVIATION

## UNDERGRADUATE PROGRAMS



# YOUR OPPORTUNITY TO TAKE FLIGHT

**Gain the best education and training possible at the world's most comprehensive aerospace university.**

Highly respected by the aviation industry, the John D. Odegard School of Aerospace Sciences offers a liberal arts core curriculum combined with a professional aviation education in a variety of specialties. Our faculty's firsthand knowledge in every field of the aerospace industry, coupled with a professional, innovative and caring approach to teaching, sets them apart.

## WHY UND AVIATION

Why should you study Aviation at the University of North Dakota?

- **Experienced Faculty**

Learn from faculty with a wide variety of both current and previous experience in all facets of the industry

- **Highest Level of Aviation Safety**

Train at the first and only collegiate program to achieve the highest level of Safety Management System (SMS) compliance

- **Restricted Airline Transport Pilot (R-ATP)**

**Certificate Eligibility**

Become eligible to serve as an airline pilot with lower total flight time (1000 vs. 1500 hours)

- **Part 141 Flight Training**

Earn your qualifications at reduced flight times in a highly-structured training environment with in-house examiners (no additional examiner fees)

- **Sophisticated Career Planning**

Take advantage of industry internships, career pathway programs, and a vast network of successful alumni

- **Fly in all Four Seasons**

Gain experience and decision-making skills in all weather conditions



A photograph of two young women sitting in the cockpit of a flight simulator. The woman on the left is wearing a green t-shirt with 'SOUTH DAKOTA' printed on it and a lanyard. The woman on the right is wearing a dark blue t-shirt with 'N. Mellore Pilot' printed on it. They are both looking at a screen in front of them. The cockpit is green and yellow.

# FIND YOUR PASSION

**The Odegard School offers a liberal arts core curriculum combined with a professional aviation education in a variety of specialties.**

## UNDERGRADUATE DEGREE PROGRAMS IN AVIATION

### **Bachelor of Science in Aeronautics: Commercial Aviation (CMA)**

#### **Airplane**

The commercial aviation curriculum is designed to fully prepare you for a variety of flight-related careers. You'll gain a solid background in aviation with a liberal arts core. Although you will graduate as a commercial pilot and flight instructor, this major is designed to prepare you as an aviation professional including advanced coursework in aerospace physiology, aerospace law and advanced aircraft operations.

#### **Helicopter**

While the Odegard School offers several aviation majors, the Commercial Aviation major with Helicopter option is specific to rotorcraft operations. Students will earn a commercial pilot certificate with instrument rating. Certified flight instructor certificate with instrument rating is also available. Students may satisfy flight course

requirements for any of the academic majors using rotorcraft.

### **Bachelor of Science in Aviation Safety and Operations (online & on-campus)**

Gain the knowledge and expertise to keep air and ground personnel and aviation support systems safe and secure. UND offers a comprehensive curriculum to prepare you to be part of the next generation of aviation safety experts. Benefit from state of the art flight data software created and maintained by UND, that prepares you for the use of aircraft data in future positions.

### **Bachelor of Science in Aeronautics: Air Traffic Management (ATM)**

Earn a B.S. in Aeronautics with a major in Air Traffic Management and benefit from the most technologically advanced control tower and radar simulators. This degree is designed to place students into ATM or related careers.

### **Bachelor of Science in Aeronautics: Unmanned Aircraft Systems Operations (UAS)**

Be among the first generation of unmanned aircraft specialists with training from the university that started it all. This degree prepares students for a career in the rapidly growing field of unmanned aircraft systems (UAS). This sector of the aviation industry utilizes both large and small aircraft flown remotely for military, law enforcement, and commercial uses. Two options are

available: actual flight training leads to a commercial pilot certificate with instrument and multi-engine ratings or private certification with instrument. Students will also complete 70 hours of UAS simulator training.

### **Bachelor of Science in Aeronautics: Aviation Studies (online only)**

If you already have an existing aviation technical background and want to achieve your bachelor's degree in the exciting field of aviation, then this program provides an opportunity to bring greater focus to your career options. Concentrate your studies in aviation safety, management or unmanned aircraft systems.

### **Bachelor of Business Administration: Aviation Management**

There's more to running a successful flight operation than just flying. With an aviation management degree, you'll gain the technical and business skills needed to manage airlines, fixed base operators (FBOs), specialized aviation service organizations (SASOs), and more. Depending on the track you select, you may earn various FAA certificates.

Specialize your aviation education, by taking one of four tracks: Flight, Airport Management, Air Transportation, or Dispatch.





# WHAT WE OFFER

## FLEET

Train in our modern fleet of airplanes, helicopters, and simulators equipped with the latest in avionics technology. In order to successfully train over 1,800 students on the flight line each term, we take great pride in our numerous aviation safety initiatives that includes an FAA approved Safety Management System (SMS), an active flight data monitoring program and voluntary safety reporting system.

Flight Operations provides exceptional in-house maintenance on our aircraft by our team that has been awarded the FAA Diamond Award of Excellence for the past 29 years.

## FLIGHT PHYSIOLOGY TRAINING

Physiology training at UND Aerospace is recognized as some of the best of its kind in the world. Our dedicated team of highly experienced aerospace physiologists utilize a military-grade altitude chamber and state-of-the-art spatial disorientation, vision, and flight-deck smoke training devices. In addition to UND students and aviation students from other colleges, UND's Aerospace Physiology Department has been providing flight physiology, altitude chamber, and spatial disorientation training to professional aviators for over 30 years.

## VIRTUAL REALITY TRAINING DEVICES

UND offers its students virtual reality (VR) training devices with customized software that closely simulates the Piper Archer. An immersive virtual environment and 360° view, combined with realistic hands-on flight control hardware, create an engaging flight simulation experience that allows for training opportunities not previously available in PC-based training devices. The VR training devices also offer the flexibility of simulating virtually any aircraft.







## LAUREN KERN

'24 | Air Traffic Management Major,  
Atmospheric Science Minor

“I am #UNDProud because of the amazing connections and resources that we are provided through the College of Aerospace Sciences. Connecting one-on-one with teachers through smaller classes encourages a brighter and stronger future. I am forever grateful for the opportunities I have had thus far and continue to receive through my time here at UND!”



# STUDENT INVOLVEMENT

UND Aviation students have many opportunities in which to get involved!

20+

Aviation student organizations

29

National Championship

250+

UND Student Organizations

## STUDENT ORGANIZATIONS

We offer over a dozen student organizations, including: Student Aviation Management Association (SAMA), Women in Aviation (WAI), and Student Aerospace Advisory Council (SAAC).

## COMPETITIVE TEAMS

Three teams compete at the collegiate (or higher) level:

- UND Flying Team
- UND Aerobatic Team
- Frozen Force Air Race Classic Team



# EXPAND YOUR HORIZONS MINORS IN AEROSPACE

## ATMOSPHERIC SCIENCES

The atmosphere and its processes impact our world every day, from the use of resources to environmental impacts, water management, agriculture, and energy conservation. This minor builds your knowledge about these processes, forecasting, and how the atmosphere impacts policies, practices, and safety measures.

## SPACE STUDIES

Explore beyond Earth by learning about the complexities of research, development and operations of space-related disciplines. With a minor in Space Studies from UND, you'll gain an understanding of the political, legal and engineering aspects involved with space ventures.

## SUSTAINABILITY STUDIES

Develop the skills and knowledge for an interdisciplinary understanding of sustainability goals and the science and strategies needed to achieve these in modern society. This UND minor offers opportunities to creatively address sustainability issues, as local and global citizens, through a more systemic approach to solve real-world problems.

# BY THE NUMBERS

## Aviation

**190,000+**  
airplane and helicopter landings annually

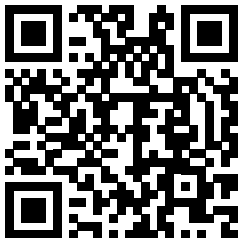
**125,000+**  
annual flight hours

**100+**  
aircraft in our fleet

**2,400**  
students

**850+**  
certificates issued annually





Learn more

[aero.UND.edu/aviation](https://aero.UND.edu/aviation)



## Schedule Your Visit

See UND Aerospace up close and ask all the questions you want! An in-person visit is a great way to see what awaits you at UND.



[UND.edu/admissions/visit](https://UND.edu/admissions/visit)

Apply today!

[UND.edu/admissions](https://UND.edu/admissions)

