

College of Aviation

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The College of Aviation is composed of the departments of Aeronautical Science, Applied Meteorology, Aeronautics, Air Traffic Management, and the Flight Department.

The College offers a Bachelor of Science degree in Aeronautical Science, Applied Meteorology, Aeronautics, Air Traffic Management, and Uncrewed and Autonomous Systems, as well as a Master of Science in Safety Science.

The Aeronautical Science Program combines flight training, in airplanes, with academic preparation in the technical and managerial aspects of aviation. This approach to aviation education and training provides students an added value over traditional flight training programs by focusing on the skills and knowledge required in today's industry. Foundational skills in mathematics, physics, communications, and aeronautics, including FAA certification as a Commercial, Instrument-Rated pilot, make up the core of the Aeronautical Science degree. Professional-level aeronautical science and flight courses prepare the graduate for a career as a professional civil or military pilot.

Students in the Aeronautical Science degree program are highly encouraged to complete a minor during the course of their studies. A minor increases the depth of a student's education and can help them be more competitive in a highly competitive job market. The Prescott Campus offers more than 20 minors.

The college also offers a Bachelor of Science in Aeronautics, in which the curriculum is designed to build upon the aviation knowledge, experience, and skills students may already bring with them to campus.

The Flight Department conducts flight training courses that are integral to the associate's degree program, and designed as FAA Part 141 Certificated Courses. Operated like a major airline training program, it provides the first opportunity for students to experience airline standards and employment. It possesses a modern fleet of five aircraft types that possess the most advanced avionics available in the general aviation market. In addition, it directly sustains College of Aviation's award-winning flight competition team: Golden Eagles. Unique to the collegiate environment it operates an FAA Part 145 certified repair station to maintain fleet health.

The Bachelor of Science in Applied Meteorology prepares students for careers in meteorology, including weather forecasting, research, the military, and aviation, including dispatching. The program is housed in a well-equipped, modern facility. The program meets all the requirements for undergraduate study in meteorology recommended by the American Meteorological Society, the National Weather Service, and the U.S. Air Force. Graduates also meet U.S. Office of Personnel Management Qualification Standards for the position of a meteorologist. The department offers state-of-the-art rooftop weather-observing equipment and a computer-equipped Weather Center.

The Bachelor of Science in Air Traffic Management (ATM) program is a hands-on degree program at the forefront of the industry. Students will actively participate in the curriculum within our state of the art Air Traffic Control lab. The knowledge and education that they gain will give them an unrivaled experience as they work with faculty and fellow students who have pioneered advancements in ATM technology. The current recommended path to becoming an air traffic control specialist with the FAA is to earn a Bachelor of Science degree in Air Traffic Management.

The Bachelor of Science in Uncrewed and Autonomous Systems (UAS) program focuses on civilian operations with special emphasis placed on the business and security applications of UASs. This major gives students a broad overview of UAS operations as well as the basic technical knowledge they need to be successful. The integration of UAS into the national airspace system is expected to create 70,000 high-paying jobs in the United States within the next 2-3 years. Graduates of the UAS

program will be perfectly positioned to become leaders in this burgeoning industry.

The Master of Science in Safety Science (MSSS) program is designed to provide students with a practical course of study in aviation safety. The degree program produces safety professionals who are skilled in providing safety management and technical expertise in a variety of industries. Graduates will be able to provide leadership, training, and guidance in safety program implementation and compliance involving EPA, OSHA, FAA, DOT, NTSB, and state health and workplace standards, and will be prepared for careers in aviation/aerospace, military, along with numerous other industries.

Embry-Riddle has positioned the College of Aviation to serve its students with distinction while investigating and developing new education and programs for pilots, controllers, UAS specialists, meteorologists, and safety professionals.

Associate's Degree

- A.S. in Air Traffic Management (<https://catalog.erau.edu/programs/undergraduate/associates/air-traffic-management/#prescotttext>)

Bachelor's Degrees

- B.S. in Aeronautical Science (<https://catalog.erau.edu/programs/undergraduate/bachelors/aeronautical-science/#prescotttext>)
- B.S. in Aeronautics (<https://catalog.erau.edu/programs/undergraduate/bachelors/aeronautics/#prescotttext>)
- B.S. in Air Traffic Management (<https://catalog.erau.edu/programs/undergraduate/bachelors/air-traffic-management/#prescotttext>)
- B.S. in Applied Meteorology (<https://catalog.erau.edu/programs/undergraduate/bachelors/applied-meteorology/#prescotttext>)
- B.S. in Uncrewed and Autonomous Systems (<https://catalog.erau.edu/programs/undergraduate/bachelors/uncrewed-autonomous-systems/#prescotttext>)

Minor Courses of Study

- Aeronautical Studies (<https://catalog.erau.edu/programs/undergraduate/minors/aeronautical-studies/#prescotttext>)
- Aeronautics (<https://catalog.erau.edu/programs/undergraduate/minors/aeronautics/#prescotttext>)
- Air Traffic Control (<https://catalog.erau.edu/programs/undergraduate/minors/air-traffic-control/#prescotttext>)
- Applied Meteorology (<https://catalog.erau.edu/programs/undergraduate/minors/applied-meteorology/#prescotttext>)
- Aviation Safety (<https://catalog.erau.edu/programs/undergraduate/minors/aviation-safety/#prescotttext>)
- Flight (<https://catalog.erau.edu/programs/undergraduate/minors/flight/#prescotttext>)
- Uncrewed and Autonomous Systems (<https://catalog.erau.edu/programs/undergraduate/minors/uncrewed-autonomous-systems/#prescotttext>)

Certification

- Aircraft Dispatcher Certification (<https://catalog.erau.edu/campuses/prescott/aviation/aircraft-dispatcher-cert/>)
- Emergency Response Meteorologist Certification (<https://catalog.erau.edu/campuses/prescott/aviation/emergency-response-meteorologist-cert/>)
- GIS and Remote Sensing Certification (<https://catalog.erau.edu/campuses/prescott/aviation/gis-remote-sensing-cert/>)

Combined Program Pathways

- B.S. in Aeronautical Science to M.S. in Aviation (Daytona Beach) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsas_dmsav/)

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- B.S. in Aeronautical Science to M.S. in Aviation Safety (Worldwide) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsas_wmsavs/)
- B.S. in Aeronautical Science to M.S. in Safety Science (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsas_pmssfs/)
- B.S. in Aeronautics to M.S. in Aviation Safety (Worldwide) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsa_wmsavs/)
- B.S. in Aeronautics to M.S. in Safety Science (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsa_pmssfs/)
- B.S. in Applied Meteorology to M.S. in Aeronautics (Worldwide) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsamet_wmsa/)
- B.S. in Uncrewed and Autonomous Systems to M.S. in Uncrewed and Autonomous Systems (Worldwide) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsuaas_wmsuas/)
- B.S. in Uncrewed and Autonomous Systems to M.S. in Uncrewed Systems (Daytona Beach) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsuaas_dmsunc/)

Master's Degree

- M.S. in Safety Science (<https://catalog.erau.edu/programs/graduate/masters/safety-science/#prescotttext>)