

College of Aviation

Dr. Alan Stolzer, Dean

The College of Aviation is comprised of the School of Graduate Studies, and the departments of Aeronautical Science, Aviation Maintenance Science, Applied Aviation Sciences, and the Flight Training Department, which is the flight laboratory component for the Aeronautical Science degree. The College of Aviation complex is a suite of modern facilities that include the Aviation building, the Advanced Flight Simulation Center, the Emil Buehler Aviation Maintenance Science Building, Flight Operations, and Fleet Maintenance. Collectively, these facilities house the academic departments, classrooms, teaching and research laboratories. Faculty and staff deliver the highest quality aviation programs found in collegiate education.

The Aviation Building houses a high altitude normobaric chamber, an airline research and operations center, a spatial disorientation lab, three air traffic control labs, an extended reality lab, an uncrewed aircraft systems lab, a meteorology lab, a meteorology broadcast studio, and a satellite mission control center lab, among many others. The Advanced Flight Simulation Center houses the most advanced flight training devices and simulators used in aviation education. This includes several FAA-qualified Level 6 devices, an FAA Level D full-flight simulator, and crosswind trainers. The Simulation Center is also home to the Pilot Preflight Immersion Laboratory for Operations Training (PILOT) program, which uses virtual reality technology to familiarize students with aircraft operations and fundamental flight maneuvers.

The Aviation Maintenance Science Department trains students to earn their FAA Airframe and Powerplant technician certificates and provides the broader educational skills and experiences necessary to become industry leaders. The department is home to a number of labs that enable students to work on aircraft structures and composites, piston and turbine engines, propellers, electrical and avionics, and many others. The Flight Department operates a fleet of approximately 115 Cessna 172 and Diamond DA 42 aircraft. The entire fleet is equipped with all glass flight decks using the Garmin G1000 avionics suite and includes the ADS-B onboard collision avoidance system.

The College of Aviation delivers 15 degree programs in seven disciplines (aeronautical science (professional pilot), aviation maintenance science, uncrewed aircraft systems, meteorology, air traffic management, safety, and space operations) and has an enrollment of more than 3,400 students every year. The Aeronautical Science program is the largest residential program of its kind in the nation. The College's degree programs range from an associate degree to the Ph.D., and alums from these programs are found throughout the aviation and aerospace industry at the highest levels.

The College is home to five graduate degree programs. The mission of the nation's first Ph.D. in Aviation program is to produce outstanding scholars for careers in research and teaching in the aviation field. The Master of Science in Aviation, the Master of Science in Occupational Safety Management, the Master of Science in Uncrewed Systems, and the Master of Science in Space Operations prepare students to become technically proficient professionals who possess the skills and background needed to manage complex projects in the aviation, safety, uncrewed, and commercial space sectors.

The College of Aviation has a robust research portfolio across all disciplines. Faculty utilize the college's laboratories and equipment to research all elements of the air transportation system, including dynamic modeling of air traffic control interfaces, airline operations, meteorology, uncrewed aircraft systems, commercial space, and safety science.

Associate's Degrees

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

- A.S. in Aviation Maintenance Science (<https://catalog.erau.edu/programs/undergraduate/associates/aviation-maintenance-science/#daytonabeachtext>)

Bachelor's Degrees

- B.S. in Aeronautical Science (<https://catalog.erau.edu/programs/undergraduate/bachelors/aeronautical-science/#daytonabeachtext>)
- B.S. in Aeronautics (<https://catalog.erau.edu/programs/undergraduate/bachelors/aeronautics/#daytonabeachtext>)
- B.S. in Air Traffic Management (<https://catalog.erau.edu/programs/undergraduate/bachelors/air-traffic-management/#daytonabeachtext>)
- B.S. in Aviation and Aerospace Safety (<https://catalog.erau.edu/programs/undergraduate/bachelors/aviation-aerospace-safety/>)
- B.S. in Aviation Maintenance Science (Part 147) (<https://catalog.erau.edu/programs/undergraduate/bachelors/aviation-maintenance-science/#daytonabeachtext>)
- B.S. in Meteorology (<https://catalog.erau.edu/programs/undergraduate/bachelors/meteorology/#daytonabeachtext>)
- B.S. in Space Operations (<https://catalog.erau.edu/programs/undergraduate/bachelors/space-operations/#daytonabeachtext>)
- B.S. in Uncrewed and Autonomous Systems (<https://catalog.erau.edu/programs/undergraduate/bachelors/uncrewed-autonomous-systems/#daytonabeachtext>)

Minors

- Advanced Air Mobility (<https://catalog.erau.edu/programs/undergraduate/minors/advanced-air-mobility/#daytonabeachtext>)
- Aeronautical Studies (<https://catalog.erau.edu/programs/undergraduate/minors/aeronautical-studies/#daytonabeachtext>)
- Air Traffic Control (<https://catalog.erau.edu/programs/undergraduate/minors/air-traffic-control/>)
- Airline Operations (<https://catalog.erau.edu/programs/undergraduate/minors/airline-operations/#daytonabeachtext>)
- Applied Meteorology (<https://catalog.erau.edu/programs/undergraduate/minors/applied-meteorology/#daytonabeachtext>)
- Aviation Law (<https://catalog.erau.edu/programs/undergraduate/minors/aviation-law/#daytonabeachtext>)
- Aviation Maintenance Science Airframe (<https://catalog.erau.edu/programs/undergraduate/minors/aviation-maintenance-science-airframe/#daytonabeachtext>)
- Aviation Maintenance Science Powerplant (<https://catalog.erau.edu/programs/undergraduate/minors/aviation-maintenance-science-powerplant/#daytonabeachtext>)
- Aviation Safety (<https://catalog.erau.edu/programs/undergraduate/minors/aviation-safety/#daytonabeachtext>)
- Aviation Sustainability (<https://catalog.erau.edu/programs/undergraduate/minors/aviation-sustainability/>)
- Avionics Line Maintenance (<https://catalog.erau.edu/programs/undergraduate/minors/avionics-line-maintenance/#daytonabeachtext>)
- Business Aviation Operations (<https://catalog.erau.edu/programs/undergraduate/minors/business-aviation-operations/>)
- Cybersecurity Application and Management (<https://catalog.erau.edu/programs/undergraduate/minors/cybersecurity-application-and-management/>)
- Flight (<https://catalog.erau.edu/programs/undergraduate/minors/flight/#daytonabeachtext>)
- Flight Test and Simulation (<https://catalog.erau.edu/programs/undergraduate/minors/flight-test-sim/#daytonabeachtext>)
- Geographic Information Systems (<https://catalog.erau.edu/programs/undergraduate/minors/geographic-information-systems/>)
- Space Operations (<https://catalog.erau.edu/programs/undergraduate/minors/space-operations/#daytonabeachtext>)

- Uncrewed Aircraft Systems (UAS) for Public Safety (<https://catalog.erau.edu/programs/undergraduate/minors/uas-public-safety/#daytonabeachtext>)
- Uncrewed and Autonomous Systems (<https://catalog.erau.edu/programs/undergraduate/minors/uncrewed-autonomous-systems/#daytonabeachtext>)

Certification

- Aircraft Dispatcher Certification (<https://catalog.erau.edu/campuses/daytona-beach/aviation/aircraft-dispatcher-cert/>)

Combined Program Pathways

- B.S. in Aeronautical Science to Master of Business Administration (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsas_dmba/)
- B.S. in Aeronautical Science to MBA in Aviation Management (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsas_dmbaam/)
- B.S. in Aeronautical Science to M.S. in Aerospace Business Analytics (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsas_dmsaebuan/)
- B.S. in Aeronautical Science to M.S. in Aviation (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsas_dmsav/)
- B.S. in Aeronautical Science to M.S. in Aviation Finance (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsas_dmsaf/)
- B.S. in Aeronautical Science to M.S. in Uncrewed Systems (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsas_dmsunc/)
- B.S. in Aeronautics to Master of Business Administration (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsa_dmba/)
- B.S. in Aeronautics to MBA in Aviation Management (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsa_dmbaam/)
- B.S. in Aeronautics to M.S. in Aerospace Business Analytics (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsa_dmsaebuan/)
- B.S. in Aeronautics to M.S. in Aviation (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsa_dmsav/)
- B.S. in Aeronautics to M.S. in Aviation Finance (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsa_dmsaf/)
- B.S. in Aeronautics to M.S. in Uncrewed Systems (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsa_dmsunc/)
- B.S. in Aviation and Aerospace Safety to M.S. in Aviation (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsaas_dmsav/)
- B.S. in Aviation and Aerospace Safety to M.S. in Occupational Safety Management (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsaas_dmsosm/)
- B.S. in Aviation Maintenance Science to Master of Business Administration (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsams_dmba/)
- B.S. in Aviation Maintenance Science to M.S. in Aviation (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsams_dmsav/)
- B.S. in Meteorology to M.S. in Aviation (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsmet_dmsav/)
- B.S. in Meteorology to M.S. in Data Science (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsmet_dmsds/)

- B.S. in Space Operations to M.S. in Space Operations (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbssso_dmsso/)
- B.S. in Uncrewed and Autonomous Systems to M.S. in Aviation (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsuaas_dmsav/)
- B.S. in Uncrewed and Autonomous Systems to M.S. in Uncrewed Systems (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/dbsuaas_dmsunc/)

Master's Degrees

- M.S. in Aviation (<https://catalog.erau.edu/programs/graduate/masters/aviation/#daytonabeachtext>)
- M.S. in Occupational Safety Management (<https://catalog.erau.edu/programs/graduate/masters/occupational-safety-management/#daytonabeachtext>)
- M.S. in Space Operations (<https://catalog.erau.edu/programs/graduate/masters/ms-space-operations/#daytonabeachtext>)
- M.S. in Uncrewed Systems (<https://catalog.erau.edu/programs/graduate/masters/uncrewed-systems/#daytonabeachtext>)

Dual Master's Programs

- M.S. in Aviation and Master of Business Administration (https://catalog.erau.edu/programs/graduate/dual-masters-programs/dmsav_dmba/)
- M.S. in Aviation and MBA in Aviation Management (https://catalog.erau.edu/programs/graduate/dual-masters-programs/dmsav_dmbaam/)
- M.S. in Aviation and M.S. in Aerospace Business Analytics (https://catalog.erau.edu/programs/graduate/dual-masters-programs/dmsav_dmsaebuan/)
- M.S. in Aviation and M.S. in Aviation Finance (https://catalog.erau.edu/programs/graduate/dual-masters-programs/dmsav_dmsaf/)
- M.S. in Aviation and M.S. in Data Science (https://catalog.erau.edu/programs/graduate/dual-masters-programs/dmsav_dmsds/)
- M.S. in Aviation and M.S. in Safety Science (Prescott) (https://catalog.erau.edu/programs/graduate/dual-masters-programs/dmsav_pmsdfs/)

Doctoral Degrees

- Ph.D in Aviation (<https://catalog.erau.edu/programs/graduate/phd/aviation/#daytonabeachtext>)