AVIATION SPACE BUSINESS ENGINEERING APPLIED SCIENCE SECURITY, INTELLIGENCE, & SAFETY COMPUTERS & TECHNOLOGY

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EMBRY-RIDDLE Aeronautical University

FLORIDA CAMPUS



Embry-Riddle Aeronautical University. Picture yourself here.



College of **Aviation**

employers seek.

From the Aerospace Forensics or "Crash Lab" where students examine actual aircraft to investigate the cause of an accident, to the Weather Broadcasting Lab that prepares meteorology students for on-camera forecasting, the college boasts labs you're not likely to find anywhere else.

Bachelor's degrees offered:

Aeronautical Science Aeronautics Aerospace & Occupational Safety ► Air Traffic Management Aviation Maintenance Science Meteorology Spaceflight Operations Unmanned Aircraft Systems Science

Other labs & facilities include:

Aerospace Forensics Lab ► Air Traffic Control Labs ► High-Altitude Normobaric Chamber Weather Broadcasting Lab Spatial Disorientation Lab SUIT Lab (erau.edu/spacesuit) Turbine Engine Test Cell Lab Unmanned Aerial Systems Lab



The many areas of study in the **College** of Aviation reflect the need for aviation professionals in every facet of the **industry**, and the labs available to students are the foundation for developing the skills

Air traffic control labs, including the En Route Lab, Control Tower Lab and TRACON Lab simulate airspace and actual FAA procedures to prepare students to excel as Air Traffic Controllers. The Weather Center's Green Screen Lab trains students to deliver televised weather reports, and weather analysis software provides data required to forecast the weather.

The Aviation Maintenance Science Hangar offers hands-on inspection, troubleshooting and repair opportunities while the Unmanned Aerial Systems Lab's 16 simulators facilitate aircrew training for this growing field.

O'Maley College of **Business**

B. B. P. P. P. P. P.

Bachelor's degrees offered:

Aviation Business Administration Business Administration*

Other labs include:

- Applied Aviation Simulation Lab
- Intelligent Aviation & Transportation Platforms Lab
- Marketing Focus Room
- Radio Frequency Identification Lab





Unlike business programs at other universities, Embry-Riddle's David B. O'Maley College of Business is closely aligned with the aviation and aerospace industry we serve. With a focus on entrepreneurship, networking and fostering real-world connections to industry leaders, it's no wonder our graduates are in demand.

The Center for Entrepreneurship **connects** students with real-life opportunities, funding and a Board of Advisors to support business development. The Marketing Focus Room lab (shown left) features divided rooms with a one-way mirror observation room.

Learn more at daytonabeach.erau.edu/cob

College of Arts & Sciences

Bachelor's degrees offered:

- Aerospace Physiology
- Astronomy & Astrophysics
- Communication*
- Computational Mathematics
- Engineering Physics*
- Global Conflict Studies
- Homeland Security
- Human Factors Psychology*
- Interdisciplinary Studies*
- Space Physics

*Indicates accelerated bachelor's to master's option available

Other labs include:

- Astrophysics & Controls Lab
- Atmospheric Physics Research Lab
- Biology & Chemistry Labs
- Cybersecurity Lab
- Laser Darkroom

- Nanomaterials Lab
- Nonlinear Waves Lab
- Space Physics Research Lab

The labs in the College of Arts & Sciences are as diverse as the many areas of study offered in its classrooms. Notable labs include the **largest university-based** telescope in the state, a part of the Southern Association for Research in Astronomy (SARA), a consortium of universities led by Embry-Riddle that **gives students** real-time access to telescopes and astronomical data from around the globe. The Advanced Aerospace Physiology Lab serves students in the only undergraduate degree of its kind in the nation — the Bachelor of Science in Aerospace Physiology (shown right, top).

Learn more at daytonabeach.erau.edu/coas

► Game-Based Education & Advanced Research Studies Lab ► Laboratory for Exosphere & Near-Space Environment Studies ► Mobile Extreme Environment Research Station





ROTC

Reserve Officer Training Corps for all branches of the military are offered on campus: Air Force, Army and Navy/Marine option.

College of **Engineering**

Other labs & facilities include:

- Rocket Lab

Bachelor's degrees offered:

Aerospace Engineering* Civil Engineering Computer Engineering* Computer Science Electrical Engineering Mechanical Engineering Software Engineering*

Advanced Vehicles Green Garage Aircraft Design Lab Aquaponics Lab Circuits & Electronics Lab Civil Engineering Infrastructure Lab Clean Energy Systems Lab Composites Lab Cybersecurity & Assured Systems Engineering Center ► Eagle Flight Research Center ► High-Performance Vehicle Laboratory Multi-Disciplinary Bioengineering Lab Nanomaterials Lab Propulsion Design Lab Radar and Microwaves Lab ► Wind Tunnel Lab





Hands-on learning is enabled through a variety of student-accessible laboratories. **As one** example of the many types of labs in the **College of Engineering, the CNC Welding** Lab (shown above, top) provides students with on-site fabrication of components for design and competition projects.

Embry-Riddle's Lady Eagles Team has competed in the annual Baja SAE (Society of Automobile Engineers) competition since 2005, one of the few all-female teams in the world (shown left).

Learn more at daytonabeach.erau.edu/coe

Student **Competitions**

One of the things that makes Embry-Riddle's engineering programs top-rated is the opportunity to compete. Student competitions build resumes, develop problem-solving skills and allow the hands-on experience employers want.

The Association for Unmanned Vehicle Systems International (AUVSI) sponsors seven robotics competitions each year as part of RoboNation. Embry-Riddle is the only school to compete in the AUVSI competitions that cover all three domains maritime, air and ground.

Learn more at roboticsassociation.org



Other competitions include:

► The American Institute of Aeronautics and Astronautics (AIAA) Space Transport Design Competition

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- ► The American Society of Civil Engineers (ASCE) Concrete Canoe Competition
- ► EcoCAR
- Institute of Electrical and Electronics Engineers (IEEE)
- eXtreme Programming
- ► IEEE Hardware Competition
- Society of Automotive Engineers (SAE) Formula Hybrid
- ▶ Women's Baja SAE









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We strive for excellence in everything we do!

TOTAL SECOND D MILITARIAN (19)

REPUBLIC AIRWAYS HOLDINGS



"Candidates were amazing. Great experience from internship and projects. Lots of interest, very professional demeanor."

Thales Group

Careers & Industry

Employers love Embry-Riddle graduates because they know our focus on the industry prepares students to excel from day one. The semi-annual Career Expo **attracts more than 100 organizations** seeking the skills and passion they find here.

A worldwide network of nearly **140,000 alumni** in every facet of the industry opens doors and provides opportunities for Embry-Riddle Eagles.

Attendees at recent Career Expo:

- The Boeing Company
- Southwest Airlines
- Lockheed Martin
- ► U.S. Customs & Border Protection
- Aircraft Owners & Pilots Association
- Collins Aerospace
- Gulfstream Aerospace
- Rolls-Royce Corporation
- Satcom Direct
- Signature Flight Support
- Transportation Security Administration
- ► U.S. Space and Rocket Center
- Garmin

Learn more at careerservices.erau.edu

Research

The John Mica Engineering and Aerospace Innovation Complex (MicaPlex) (shown top right) is the cornerstone building of the Embry-Riddle Research Park. The building's **nine research labs** span the gamut of engineering research at the Daytona Beach Campus, and present a unique collaborative opportunity for business and the university community to develop, refine and bring new products and technological services to market.

Discovery Day is an annual event that encourages students of all majors at the Daytona Beach Campus to submit abstracts and showcase research projects. Sponsored by the Office of Undergraduate Research, faculty and staff choose the best submissions for special recognition. In 2020, topics ranged from evaluation of evacuation scenarios to slosh control systems to legal implications of commercial space mining. Students often qualify for funding. Summer research fellowships provide students with a unique opportunity to conduct research under the supervision of a faculty mentor. Students selected for this program receive a stipend to help cover the costs of staying on campus. Learn more at commons.erau.edu/discovery-day.

The Embry-Riddle Eagle Flight Research Center (EFRC) serves as the University's aerospace R&D facility. The state-of-the-art center is equipped to conduct a variety of projects, including the successful design, modification and flight of the "World's First Parallel Direct-Drive Hybrid Aircraft" for the NASA/ Google-sponsored Green Flight Challenge.

Learn more at daytonabeach.erau.edu/research



Research labs & facilities:

- ► Eagle Flight Research Center
- Center for Cyber and System Assurance
- Space Physics Research Lab
- Next-Generation Advanced Research (NEAR) Lab for Air Traffic Control







Flight

Our students have access to one of the **largest and most advanced fleets** of training aircraft and flight training devices (FTDs) available. Embry-Riddle's fleet of aircraft include:

- Cessna 172S NAV III used primarily for single-engine training
- Diamond DA42-VI used primarily for multi-engine training
- Super Decathlon for upset training
- State-of-the-art Garmin G-1000 glass cockpits offer the latest in flight technology
- ► Frasca C172 FTD and Frasca CRJ-200 FTD

Automatic Dependent Surveillance Broadcast (ADS-B) installed in each aircraft enhances safety by monitoring aircraft in non-radar environments and transmitting critical weather data.

Hiring agreements with the airlines put our students on the fast track to flight careers.

Learn more at daytonabeach.erau.edu/coa

"Rapid fleet expansion and high pilot retirement rates create a further need to develop 180,000 first officers into new airline captains, more than in any previous decade."

According to the CAE's Airline Pilot Demand Outlook

Student Clubs & **Organizations**

Clubs for fun — clubs for professional developmentclubs for worship — clubs for networking — you'll find them all at Embry-Riddle, and some of our clubs you are not likely to find at other schools. They include the Game Development Club where students use virtual reality and 3-D modeling to create games like "The Hauntlet."

Plus, you can get involved with the campus radio station, WIKD 102.5, as well as Touch 'N Go Productions, the division that oversees campus entertaining, *The Avion*, our award-winning student newspaper, or student government. If you're interested in Greek Life, you'll find a community of fourteen national fraternities and sororities.

Learn more at connection.erau.edu

You'll find nearly 200 clubs and organizations on campus including:

- Embry-Riddle Future Space Explorers and Developers Society
- Airport Management Club
- ► Eagle Sport Aviation Club
- Society of Human Performance in Extreme Environments
- ► Women in Aviation
- Artificial Intelligence Club
- Barefoot Flying Club
- Diving Eagles Scuba Club
- MicroJET Team
- Microgravity Club
- Robotics Association
- Spacecraft Development Club
- Surf Club
- White Hat Eagles Cybersecurity Club
- Beekeeping Club
- Dancing Eagles
- ▶ Pep Band
- Gamers Gild













Visit daytonabeach.erau.edu for more information!

- ► Schedule a visit
- Register for an event
- ► Learn about the admission process
- ► Explore degrees
- ► Chat with a representative
- Apply online
- ► Join our mailing list
- ► Connect on social media
- Follow student bloggers
- Consult campus calendar for athletic events, speaker series, astronomy open houses and more!



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