

College of Engineering

Dr. Jeffrey Miller, Dean

At Embry-Riddle's College of Engineering at Prescott our mission is to educate the next generation of engineers in the skills they need to succeed in an increasingly-changing world to improve and enhance the lives of people. We provide an undergraduate education nationally recognized for its rigor with a strong emphasis in engineering and design, coupled with hands-on project-based education using state-of-the-art engineering tools. Our students are comfortable using the full range of engineering approaches, including real-world lab-based testing, computer simulations, and the latest AI-assisted design and analysis approaches.

The college's vision is to provide constant innovation to the fields of engineering education related to fields of aeronautics and aerospace so students are prepared to pursue careers in industry, graduate school, or government and military service. Our graduates will go out and change the world, directly through the products, services, and systems they develop. Our college prepares graduates who recognize the complexity of the world, who appreciate the relationship of their work to society, and who are dedicated to creative enterprises for the good of humankind.

ERAU-Prescott's engineering students are recognized for their deep appreciation and comprehension of the principles of engineering analysis and design paired with an ability to identify opportunities, articulate a vision, and see it to fruition. Our faculty and staff support our students to give them the confidence they need to pursue any desired opportunity.

The College of Engineering offers five complementary programs, with an emphasis on the aerospace and high-tech industries. Aerospace, Computer, Electrical, Mechanical, and Software Engineers often are the primary team members in the design, analysis, or refurbishment of aircraft, spacecraft, engines, rockets, and the ground-based systems that support their operations. The strength of the College is built on this combination of disciplines focused on solving the complex engineering development problems of our society and industry.

- Aerospace Engineering#concentrates its efforts on aircraft and spacecraft systems including structures, aerodynamics, flight mechanics, performance, and control.
- Computer Engineering#focuses on the design and development associated with computer hardware, including chips and circuits, and on the analysis, design, and development of mission-critical software systems employed in these devices.
- Electrical Engineering#focuses on control systems, electronic communications systems, and electrical power systems, which provides the technical specialization necessary to understand the design and operation of modern avionics systems.
- Mechanical Engineering#focuses on propulsion, robotics, and energy with an emphasis on jet aircraft and rocket engines, autonomous vehicles such as Uncrewed Aerial Vehicles (UAVs) and Planetary Rovers, and renewable energy sources such as solar and wind.
- Software Engineering#focuses on the design of security and safety-critical software, along with how to integrate software into embedded systems, to operate complex systems.

All of the programs in the College of Engineering are accredited by the Engineering Accreditation Commission of ABET in the general criteria and the discipline-specific criteria applicable to each degree. Our Industry Advisory Boards help us to maintain rigorous academic standards that produce graduates that companies want to hire. We are proud to have a 95% rate of our students being employed or in graduate school within six months of graduating. Our students do not leave Embry-Riddle with a job, but they leave with *the* job that they want.

Bachelor's Degrees

- B.S. in Aerospace Engineering (<https://catalog.erau.edu/programs/undergraduate/bachelors/aerospace-engineering/#prescotttext>)

- B.S. in Computer Engineering (<https://catalog.erau.edu/programs/undergraduate/bachelors/computer-engineering/#prescotttext>)
- B.S. in Electrical Engineering (<https://catalog.erau.edu/programs/undergraduate/bachelors/electrical-engineering/#prescotttext>)
- B.S. in Mechanical Engineering (<https://catalog.erau.edu/programs/undergraduate/bachelors/mechanical-engineering/#prescotttext>)
- B.S. in Software Engineering (<https://catalog.erau.edu/programs/undergraduate/bachelors/software-engineering/#prescotttext>)

Minor Courses of Study

- Aerospace Engineering (<https://catalog.erau.edu/programs/undergraduate/minors/aerospace-engineering/#prescotttext>)
- Alternative Energy (<https://catalog.erau.edu/programs/undergraduate/minors/alternative-energy/#prescotttext>)
- Astronautics (<https://catalog.erau.edu/programs/undergraduate/minors/astronautics/#prescotttext>)
- Computer Science (<https://catalog.erau.edu/programs/undergraduate/minors/computer-science/#prescotttext>)
- Electrical and Computer Engineering (<https://catalog.erau.edu/programs/undergraduate/minors/electrical-and-computer-engineering/#prescotttext>)
- Mechanical Engineering (<https://catalog.erau.edu/programs/undergraduate/minors/mechanical-engineering/#prescotttext>)
- Propulsion (<https://catalog.erau.edu/programs/undergraduate/minors/propulsion/#prescotttext>)
- Robotics (<https://catalog.erau.edu/programs/undergraduate/minors/robotics/#prescotttext>)
- Systems Engineering (<https://catalog.erau.edu/programs/undergraduate/minors/systems-engineering/#prescotttext>)

Combined Program Pathway

- B.S. in Aerospace Engineering (Prescott) to M.S. in Aerospace Engineering (Daytona Beach) (https://catalog.erau.edu/programs/undergraduate/combined-program-pathways/pbsae_dmsase/)