



Engineering and Computer Science Majors

Aerospace Engineering

About

Aerospace engineering focuses on the development of aircraft and spacecraft. Design of flight vehicles must consider the demanding conditions they are subjected to (changes in atmospheric pressure, temperature, structural loads and more). Aerospace engineering involves the interaction among the technologies in aerodynamics, propulsion, avionics, materials science, structural analysis and manufacturing. Because of the complexity and number of disciplines involved, aerospace engineering is performed in teams of engineers who each have their own specialized expertise area.

UCF's program prepares students to have a fundamental knowledge of aerodynamics, aerospace materials, structures, propulsion, stability and control, and flight mechanics. Graduates will be trained to be competitive in their role as aerospace engineers in society, and will have an awareness of ethical, environmental, economic, safety and quality issues.

Coursework Includes

- Flight Mechanics
- Aerothermodynamics of Propulsion Systems
- Modeling Methods
- Solid Mechanics
- Analysis & Design of Aerospace Structures
- Thermodynamics
- See program requirements in the UCF undergraduate catalog at catalog.ucf.edu

Where Aerospace Engineering Graduates Work

- NASA
- Lockheed Martin
- The Boeing Company
- Northrop Grumman
- General Electric
- Harris Engineering

Typical Starting Salary / Possible Job Titles

\$69,000. Advanced Manufacturing Engineer; Air Safety Engineer; Flight Test Instrumentation Design Engineer; Manufacturing Engineer; Nuclear Engineer; Production Engineer; Project Engineer; Quality Engineer; Space Systems Engineer; Systems Integration and Test Engineer; Structural Analysis Engineer; Systems Engineer.

Related Student Organizations at UCF

American Institute of Aeronautics and Astronautics
Students for the Exploration and Development of Space

Related Minors

Bioengineering; Business; Computer Science; Engineering Leadership; Materials Science & Engineering; Mathematics; Physics; Robotics

Contact

Department of Mechanical and Aerospace Engineering
407-823-2416

mae.ucf.edu

University of Central Florida

Located in Orlando, Florida, UCF is one of the nation's largest universities with more than 66,000 students from all 50 states and 152 countries. UCF's 13 colleges offer 212 degree programs. Students find community and camaraderie in more than 600 registered student organizations. To learn more, visit www.ucf.edu/admissions.

College of Engineering and Computer Science

With 10,000+ students, the college is among the nation's top producers of engineers and computer scientists. Students receive rigorous instruction, enhanced with real-world hands-on experiences, to graduate with solid technical skills in 11 majors offered: aerospace engineering; civil engineering; computer engineering; computer science; construction engineering; electrical engineering; environmental engineering; industrial engineering; information technology; mechanical engineering; and optics and photonics.

During their academic career, students benefit from unique and innovative leadership and diversity-based support programs, such as the UCF Engineering Leadership & Innovation Institute (eli²) (eli2.cecs.ucf.edu), and renowned STEM retention programs described in detail at stem.ucf.edu/stem-programs-at-ucf.

UCF Rankings

- Nation's #1 workforce supplier to the aerospace and defense industry (*Aviation Week*, 2015, 2016)
- Ranks 11th among U.S. public universities for number of National Merit Scholars (289).
- *Kiplinger*, *Forbes* and *The Princeton Review* rank a UCF education among the nation's best values.
- Ranks #1 in nation, #13 in world among 13,000 regional teams, 2017 Association of Computing Machinery's International Collegiate Programming Competition.
- Home to three-time national champions: UCF Collegiate Cyber Defense Competition Team – 2014, 2015, 2016.
- U.S. Southeast Programming Team Champions – 2012, 2013, 2014, 2015, 2016.
- Ranks #5 out of 225 U.S. universities for number of patents granted, and #22 for success in research that leads to new technologies, products and companies (*2017 Milken Institute report*).
- Top choice of high school seniors in Florida and in the 12 states of the U.S. Southeast region (*2016 Cappex College Considerations Report*)



UNIVERSITY OF CENTRAL FLORIDA
*has been designated as a
National Center of Academic Excellence
in Cyber Defense Education*



**College of Engineering
and Computer Science**

UNIVERSITY OF CENTRAL FLORIDA

