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 catalog at http://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
$67,850. 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

Contact
Department of Mechanical and Aerospace Engineering
407-823-2416
http://mae.ucf.edu

Related Minors
Bioengineering; Business; Computer Science; Engineering Leadership; Materials Science & Engineering; Mathematics; Physics; Robotics
University of Central Florida
UCF's 13 colleges provide education and opportunities to 64,000 students from all 50 states and 152 countries. Located in Orlando, Florida, UCF is one of the nation's largest universities with 212 degree programs from which to choose. Students find community and camaraderie in more than 600 registered student organizations. See the UCF Viewbook at www.ucf.edu/admissions to learn more.

College of Engineering and Computer Science
With nearly 10,000 students, the college is among the nation’s top producers of engineers and computer scientists. Students receive rigorous instruction and graduate with solid technical skills.

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

These programs are among the many reasons why the University of Central Florida was recognized along with Harvard, MIT, Stanford and Duke as one of the nation’s most innovative universities in U.S. News & World Report Best Colleges 2016 guide.

UCF Rankings
- Nation's #1 workforce supplier to the aerospace and defense industry (Aviation Week, 2015, 2016)
- Ranked #3 in nation, #28 in world, 2016 Association of Computing Machinery's International Collegiate Programming Competition.
- Ranked #1 among all state universities in Florida for performance measures that include graduation rates and graduates' employment and wages (Florida Board of Governors 2016)
- No. 1 choice of high school seniors in Florida and in the 12 states of the U.S. Southeast region (2016 Cappex College Considerations Report)