



UNIVERSITY OF CENTRAL FLORIDA

AEROSPACE AND DEFENSE



UCF's Lockheed Martin Cyber Innovation Lab is a high-tech space that serves as a learning hub where students can develop their cybersecurity and engineering skills.

Innovative technologies and renowned research at UCF are shaping the future of aerospace and defense. Our faculty's vast experience and collaborative efforts with industry are helping engineer future aircraft and aeronautical vehicles, strengthen global security, develop sustainable solutions, and explore ways to improve air and space transportation.

Strong partnerships with industry help align programs to meet demand and advance research to solve the world's greatest problems right here at UCF.

And by providing the necessary talent and brainpower to fuel industry partners such as Lockheed Martin, Siemens and NASA, the university is fulfilling a demand for critical, high-value jobs across the state.

While other schools adapt to the changing environment, UCF is building a university for the future that paves the way for academic innovation and inclusive excellence that will support the economic diversity of our state for generations to come.

“Many people don’t realize it, but Lockheed Martin employs more UCF graduates nationwide than alumni of any other university.”

Amy Gowder
former vice president of Lockheed Martin



NO. 1

▶ **Supplier of graduates to the aerospace and defense industries for six years in a row**
Aviation Week Network

NO. 3



▶ **Homeland security and emergency management graduate program in the nation**
U.S. News & World Report

27%

▶ **of Lockheed Martin employees in Orlando are UCF graduates**

29%

▶ **of Kennedy Space Center employees are UCF graduates**

NO. 73

▶ **Graduate engineering programs in the nation**
U.S. News & World Report

\$2.9M

▶ **Awarded by the U.S. National Science Foundation to train the next generation of cybersecurity defenders**

\$21.6M

▶ **Awarded by the Department of Defense in 2022 for research projects**

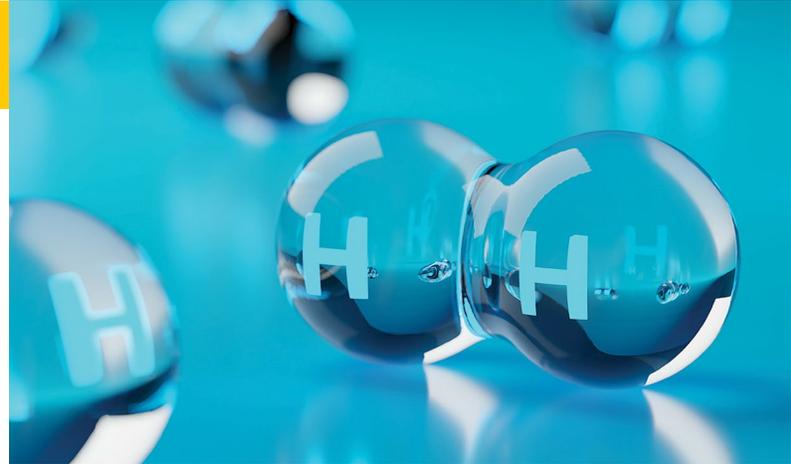
NY to LA in Under 30 Minutes

A UCF-developed propulsion system is changing the paradigm of what's possible in aerospace and defense. Kareem Ahmed, associate professor in UCF's Department of Mechanical and Aerospace Engineering, says the technology has the potential to revolutionize hypersonic propulsion and energy systems, in addition to faster air travel — with flight speeds of Mach 6 to 17. The technology could also be used in rockets for space missions to make them weigh less, travel farther and burn more cleanly.



UCF Researchers Working to Stop Hydrogen Leaks

Department of Mechanical and Aerospace Engineering faculty Jan Gou and Kareem Ahmed are developing and testing materials that will stop hydrogen leaks much like the ones that halted the launch of Artemis 1 in a two-year project slated to begin December 2022. Boosted by a nearly \$1 million grant from the U.S. Department of Energy, the project will focus on materializing ceramic composites that are capable of handling higher temperatures, hydrogen embrittlement, rich water vapor content and oxidation in the combustion chamber.



No. 1 and No. 2 Cybersecurity Teams in the Nation in 2022

Two UCF Collegiate Cybersecurity Competition teams (CCC) thwarted a simulated cyberattack and beat out 142 other teams to win first and second place in the 2022 U.S. Department of Energy CyberForce Competition. CCC, which has placed in multiple national competitions over the past decade, gives students real-world training in safeguarding the nation's critical infrastructure from cyberattacks. Hands-on opportunities at UCF provide the quality experience needed to develop a talented engineering workforce that will help Florida continue to be a leader in aerospace and defense.



Where UCF Graduates Work



UCF Institutes, Associations and Affiliations



Explore more about UCF's impact on aerospace and defense at ucf.edu/aerospace-defense or scan here:

