



MASTER OF SCIENCE IN

AEROSPACE ENGINEERING



AEROSPACE.EGR.UH.EDU

ENGINEERING NEW HORIZONS

AEROSPACE ENGINEERING AT THE UNIVERSITY OF HOUSTON

Welcome to Aerospace Engineering at the University of Houston! The Houston area is nationally and internationally recognized for the strength of its aerospace related activity due to the presence of NASA Johnson Space Center and the multiple aerospace-related industry and companies in the area. The Aerospace Engineering Program at UH provides graduate education in aerospace engineering to those interested in acquiring advanced knowledge, conducting research and pursuing advanced careers in the field. This is an interdisciplinary program taught by faculty in the Mechanical Engineering Department with assistance from other colleges and departments.

Areas of coursework and research concentration include:

- Aerodynamics and Heat Transfer
- Structural Mechanics and Materials, and
- Controls and Dynamics



Cullen College of Engineering
UNIVERSITY OF HOUSTON



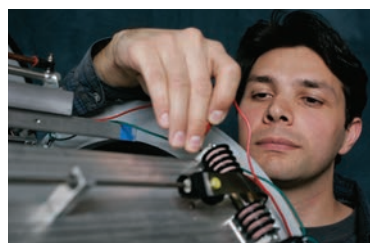
PROGRAM BENEFITS

Students in the interdisciplinary aerospace engineering program are trained to understand full systems involved in aerospace engineering, from aerodynamics and materials to space physics and human factors. Aerospace engineering students often work in full-time, part-time or internship-based positions at NASA JSC and other aerospace companies while pursuing their degree at UH. Graduates of the program exceed the expectations of employers in the aerospace industry and can be found in leadership positions throughout the Houston region and beyond.

To expand their knowledge base, students are encouraged to attend elective courses in other areas, such as Mathematics, Space Physics, Computer Science, Telecommunications, Human Factors, Systems Engineering, and others. Thesis and dissertation topics span the entire aerospace engineering field, including modeling and simulation of aerospace systems, structural dynamics and vibration isolation, system health monitoring, space automation and control, heat transfer and thermo-fluid systems, materials for aeronautical and space applications, aerodynamics, and more.

WHAT TYPES OF GRADUATE DEGREES DO YOU OFFER IN AEROSPACE ENGINEERING?

The UH Cullen College of Engineering offers M.S. thesis and non-thesis degrees in aerospace engineering, dual degree offerings in mechanical engineering and aerospace engineering, and dual degree offerings in aerospace engineering and space architecture as well.



RESEARCH LABS AND CENTERS

- Advanced Function Materials Laboratory
- Energy Devices Fabrication Laboratory
- Engine Control Research Laboratory
- Heat Transfer Laboratory
- Institute of Fluid Dynamics and Turbulence
- Materials for Energy Storage
- Materials Engineering Laboratory
- Microscale Thermal Transport Phenomena
- Smart Materials & Structures Laboratory
- Systems Design Laboratory
- Surfaces and Interfaces Mechanics

CAREERS

Examples of how program graduates apply their skills in industry include:

Developing smart materials for building aircrafts and spacecraft.

Advanced propulsion and the design of more environmentally friendly hybrid jet-fuel electric systems for launching aircrafts and spacecraft.

Leading the commercial space industry by developing new spacecraft, vehicles and systems for human space flight, space tourism and research.

Designing unmanned aerial vehicles (UAVs) for scientific research, national security, weather monitoring and much more.

FOR MORE INFORMATION

For more information on eligibility and admissions requirements, please visit aerospace.egr.uh.edu/graduate-program/program-description