

EXPLORE

# Aerospace Engineering



**PennState**  
College of Engineering



Graduates of the aerospace engineering program at Penn State are among the most highly recruited by industry, government, and graduate schools nationwide.



Our innovative curriculum provides a broad-based education in the core disciplines and integrative systems of aerospace engineering, including aerodynamics, structures, propulsion, dynamics and controls, and software.

We combine comprehensive coursework, extensive hands-on, practical experiences, and team projects to emphasize learning and discovery, ethics, leadership, and communication skills.

Students also gain valuable fundamental knowledge about emerging fields such as unmanned air systems and autonomous vehicles, nano-materials, robotics, machine learning, and wind energy.

Our graduates are trained to become future leaders in an ever-evolving, critical industry, and who will go on to make a positive impact on global society and contribute to programs of national importance.

Aerospace engineers from Penn State have obtained positions of significant responsibility in various industries including aircraft, helicopters, launch vehicles, spacecraft, engines, mission payloads, and various hardware and software suppliers to vehicle integration companies, as well as positions in government agencies such as NASA and DARPA, and in the military.



## Engineering Ambassadors

Build leadership skills and gain communication

experience through the outreach program that seeks to motivate the next generation of engineers.

## Student Organizations

The department is home to 12+ student organizations and student chapters representing various aerospace engineering professional and honor societies.

## Study Abroad Programs

Gain a worldwide perspective as you develop foreign language skills, cultural understanding, and professional experience.



**AERO**

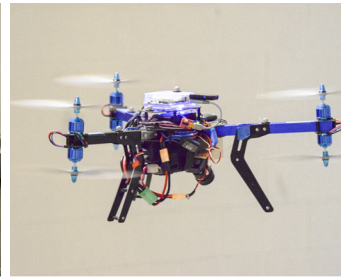
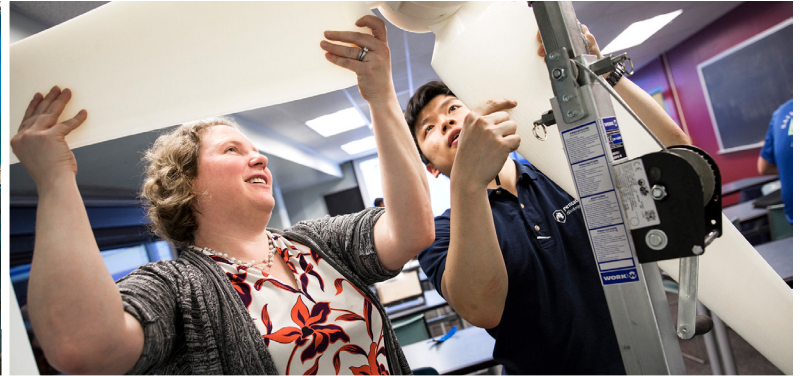
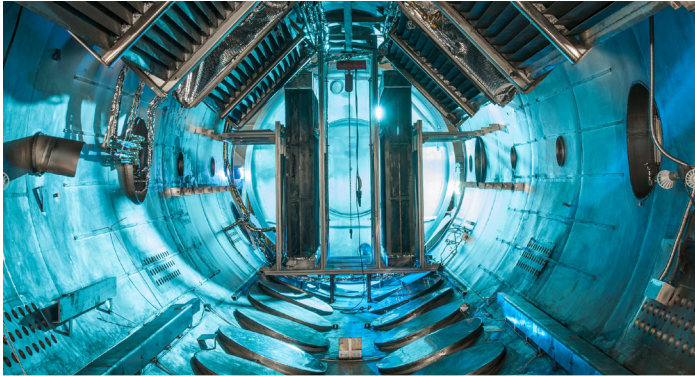
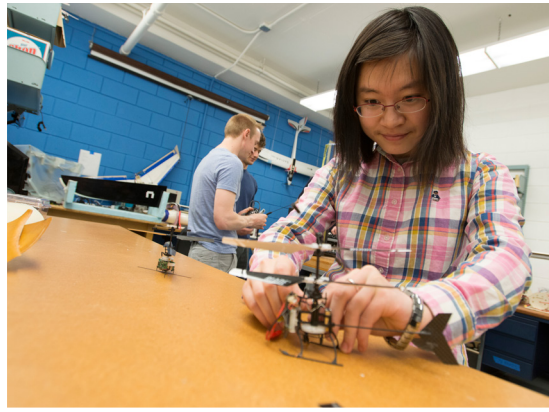
Hear from students and alumni by watching the Exposure to Major video series: [bit.ly/PennStateEngineering](https://bit.ly/PennStateEngineering)

AVERAGE ENTRY-LEVEL SALARY  
OF AEROSPACE ENGINEERING  
GRADUATES

**\$78,509**

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# What is an aerospace engineer?

Aerospace engineers design, develop, test, and produce aircraft, spacecraft, propulsion systems, satellites, missiles, and related systems and equipment, and solve problems in advancing atmospheric and space flight, with two major and overlapping branches: aeronautical engineering and astronautical engineering. They develop leading-edge technologies and integrate them into aerospace vehicle systems used for transportation, communications, exploration, and defense applications.

**Examples of career opportunities:** Aerospace engineers work primarily in the aerospace industry, at systems and software suppliers, corporate labs, government labs, and universities. The skill set of aerospace engineers is extremely broad and multidisciplinary, and the experience of aerospace engineers as systems architects and engineers allows them to make contributions in many diverse sectors.

**aero.psu.edu**

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**Rachel Axten**



*"From day one, I worked on teams with other highly motivated students to solve technical problems, while exploring the different disciplines within aerospace engineering. I was able to share my work and inspire the next generation of engineering students through outreach organizations offered by the department. The faculty and staff were behind me every step of the way to guide and motivate my success in their role as exceptional teachers, mentors, and advisers."*