

LIFTOFF Summer Institute

Equipping Teachers to Inspire and Prepare Tomorrow's Workforce for 35 years

\$2,000 launches one teacher and the next generation of aerospace talent. The return is exponential!

Workforce Impact

50 educators annually from across the U.S.
7,000+ students impacted each year through mission-aligned lessons and mentorship.

Educators train 1000+ other educators collectively presenting at local, state, and national conferences building a national network of educators for sharing STEM resources and strategies.

Space Grant–Aligned Outcomes

- Technical training resources to prepare future aerospace professionals
- Curriculum integration of current NASA missions and technologies
- Expands aerospace collaboration between educators and subject matter experts
- Informs educators of internships, research positions, and careers that advance the U.S. aerospace sector

Alumni have earned Presidential STEM Awards, Fulbright Scholarships, flown in microgravity, and entered NASA and aerospace careers making nationwide impact.



Introduction to astronaut training and careers in engineering.

Educator Voices

“LiftOff connected me with NASA engineers and gave me the technical understanding to prepare my students for aerospace careers.” — STEM Educator, FL
Guiding students into aerospace pathways

“This program gives me real-world NASA content, industry connections, and the tools to inspire students toward STEM careers.” — High School STEM Teacher, TX
Empowering students to pursue NASA and STEM careers

2025 Highlights: Flight Paths Toward Innovation

Featured Speakers

NASA: Fluid Dynamics in Microgravity

VAST: Commercial Space Station and the Upcoming Haven Missions

APL: Dragonfly Mission – Engineering to Explore Titan

NASA: Scientific challenges of returning to the Moon

QUESST: Aerodynamics behind the X-59

Facility tours: Neutral Buoyancy Lab, Mission Control, Astronaut Training Facility, Robotics.

Astronaut Speakers

Fred Haise, Dan Tani, and Cady Coleman provided educators with inspiration and practical advice to share with their students

Facility Tours

At JSC's NBL and Building 9, educators met with NASA engineers and scientists to learn about current technologies, internships, and career opportunities at NASA



Information in automation, robotics, and spacecraft systems

LiftOff Matters!

The demand for a technically skilled aerospace workforce has never been greater. LiftOff is a proven, scalable model for training educators who inspire and prepare thousands of students annually for careers in aerospace, engineering, and advanced technology. At LiftOff 2025's start, none of the 50 educators knew about the coming commercial space station, Artemis challenges, or Dragonfly engineering. In just one week, LiftOff closed that gap, sending them home ready to launch the next aerospace workforce. ***Please earmark \$2,000 per teacher from your state to sponsor hotel, meals, local transportation, and \$750 travel stipend. Without the travel stipend, the cost would be \$1,250.***