

Lockheed Martin

Hypersonics University Engagement

Program Overview



In support of America’s urgent hypersonics national security imperative, Lockheed Martin is actively partnering with universities across the United States on hypersonics projects with the mission of enhancing our talent recruitment, expanding our capabilities and developing the next generation of the defense industrial base workforce. This includes active support of the University Consortium for Applied Hypersonics (UCAH), a collaborative network of 100+ universities. Additionally, we have invested more than \$5 million of internal Research & Development funding over the past two years in support of 14 university engagement projects across nine universities that were selected to accelerate the development of advanced hypersonic capabilities to our government customers. These projects tap into a highly skilled and technical group of students and researchers who work directly with Lockheed Martin engineers to solve the difficult challenges involved in advancing our national capabilities in hypersonic technologies.

The mission of Lockheed Martin Hypersonics University Engagement:



Talent Recruitment

We’re engaging with academia to identify and recruit hypersonic talent for possible future employment at Lockheed Martin. This includes our partnership with the UCAH, which is an inclusive, collaborative network of 100+ universities working with government, industry, national laboratories, federally funded research centers, and existing university affiliated research centers.



University Mentorship

We are partnered on numerous technology transition projects and are regularly engaged with over **40 universities** and counting through the consortium to broaden the national technical base.



Research Projects

We have invested more than **\$5 million** for basic and applied university engagement research projects related to hypersonic capabilities that align to the priority research topics of interest to the defense industry (see below).



Alignment to Current DoD Funding

We intentionally fund projects that build upon or complement prior government investment to accelerate and expedite technology transition.



The university engagement projects align under one or more of Lockheed Martin's priority interest areas:



High-Temperature Materials Characterization & Certification



Survivable Sensors and On-Board Electronics (Mach5+ Environment)



Hypersonic Aerothermodynamics



Non-Equilibrium Physics of Plasmas



End-Game Maneuverability



Systems Integration



Stores Separation at High Mach

Our completed and ongoing Hypersonics University Engagement projects include:

- Materials, University of Central Florida
- GNC/Subsystems, University of Maryland, College Park
- Materials, Purdue University
- Aerothermodynamics, Texas A&M University
- Materials, University of Illinois
- Aerothermodynamics, University of Tennessee-Knoxville and University of Tennessee Space Institute
- GNC/Subsystems, University of Texas at Austin
- Aerothermodynamics, University of Colorado, Boulder
- Aerothermodynamics, Purdue University
- Materials, University of Tennessee-Knoxville
- System Engineering, Georgia Institute of Technology