



UCF

Florida Space
Institute

UNIVERSITY OF CENTRAL FLORIDA



UCF as SpaceU & Florida Space Institute Overview

Reach for the Stars



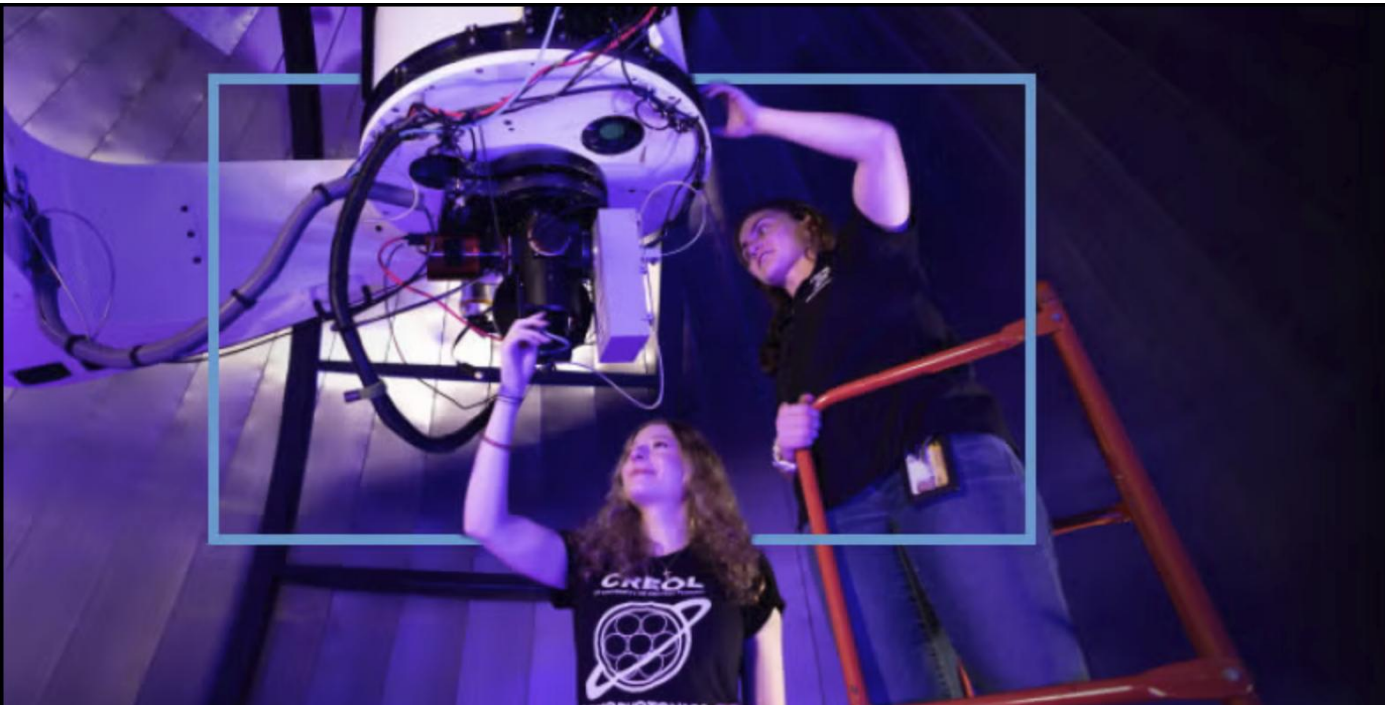


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 - Overview of UCF as a Space University
 - Academic programs, research centers, and partnerships
- **Florida Space Institute Highlights**
 - Mission, research areas, and specialized infrastructure
- **Impact & Achievements**
 - Grants, partnerships, student involvement, and industry collaborations
- **Looking Ahead**
 - Future initiatives



UCF Space Ecosystem



UCF ONLINE SPACE MBA

STARTS SPRING 2026



UCF as a Space University

Academic Programs in Space Science

UCF offers strong academic programs in optics, aerospace engineering, physics, planetary sciences, space business, and more:

- **Undergraduate degrees:**
 - Mechanical/Aerospace Engineering
 - Electrical/Computer Engineering
 - Computer Sciences
 - Physics
 - Photonic Science and Engineering
- **Graduate degrees:**
 - Aerospace Engineering
 - Physics with Planetary Sciences Track
 - Optics and Photonics
 - Graduate certificate in space electronics
 - *Planetary and Space Sciences PhD*
 - *Space MBA*
 - *Aerospace Medicine*



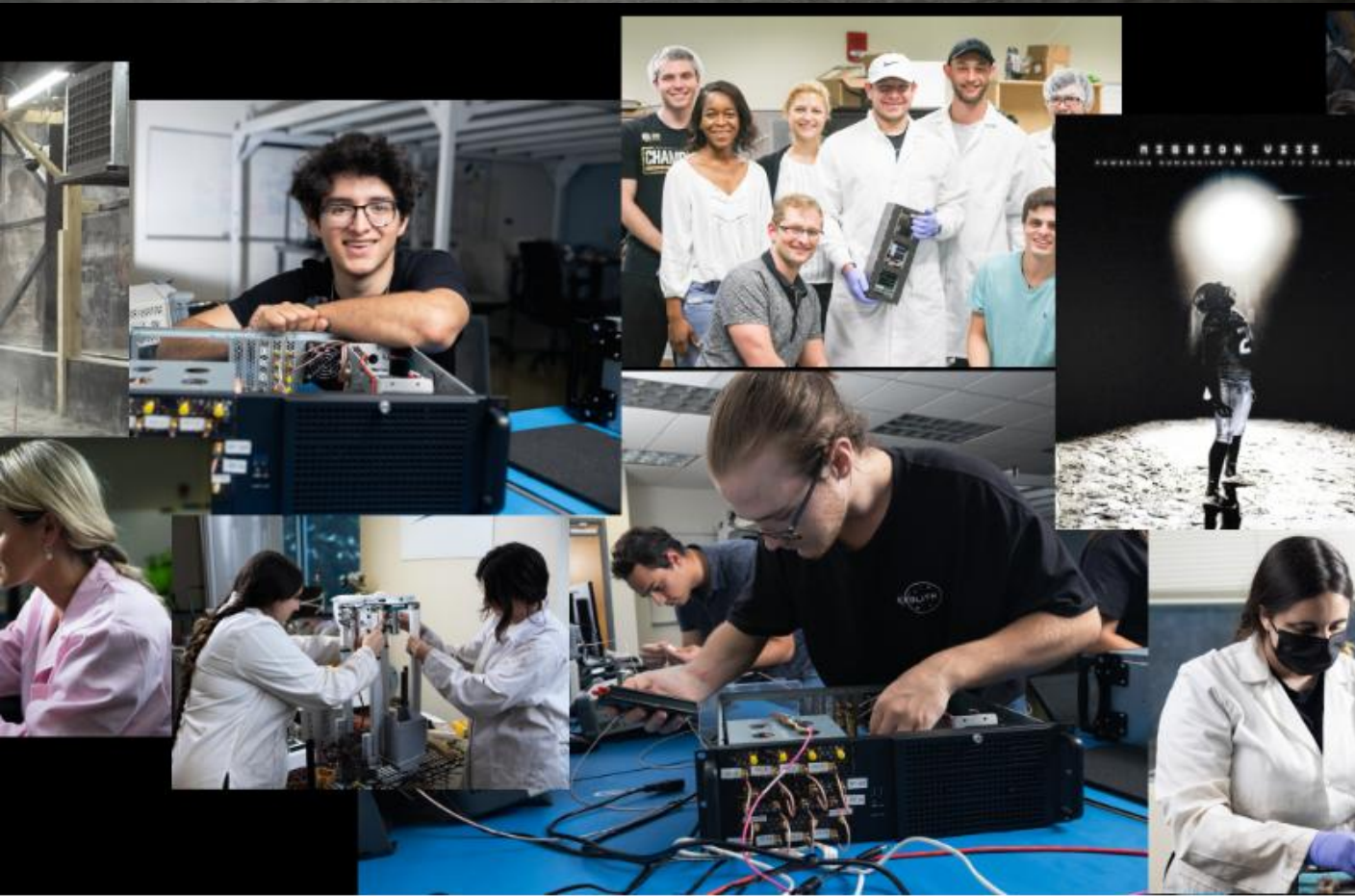
UCF as a Space University

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Specialized Research Centers

Centers like the Florida Space Institute, the Institute for Simulation and Training, Hyperspace, and the Center for Aerospace and Extreme Environments Medicine drive advanced space research and innovation at UCF.





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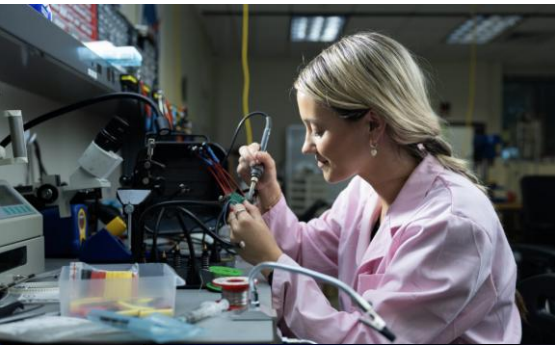
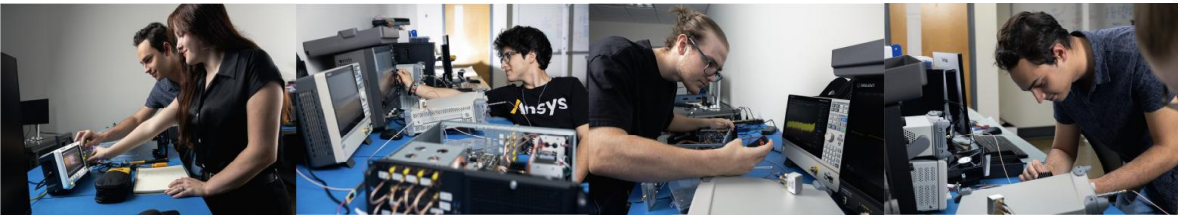
Strategic Industry Partnerships

Proximity to NASA Kennedy Space Center enables partnerships with government and commercial space organizations, such as Lockheed Martin, Northrop Grumman, Blue Origin, SpaceX, L3Harris Technologies, Siemens, Honeywell, and more.



Florida Space Institute

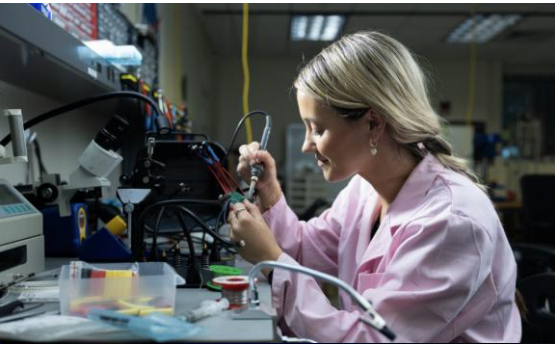
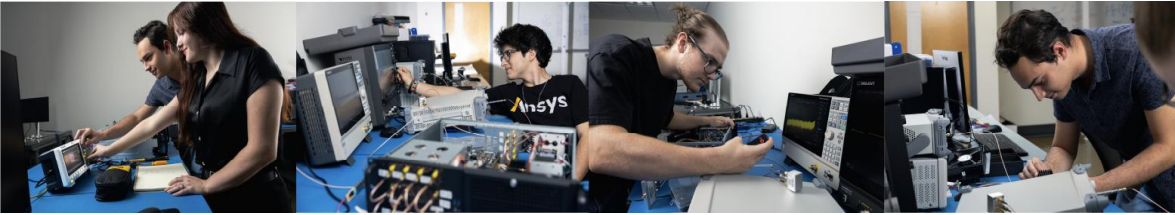
FSI Mission and Research



FSI Mission Overview

FSI supports research, education, and outreach to advance space science and technology at UCF, in Florida, and beyond.

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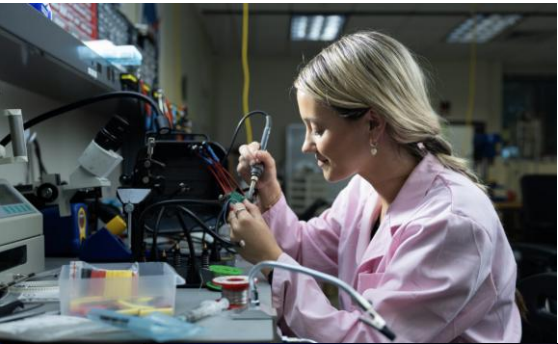
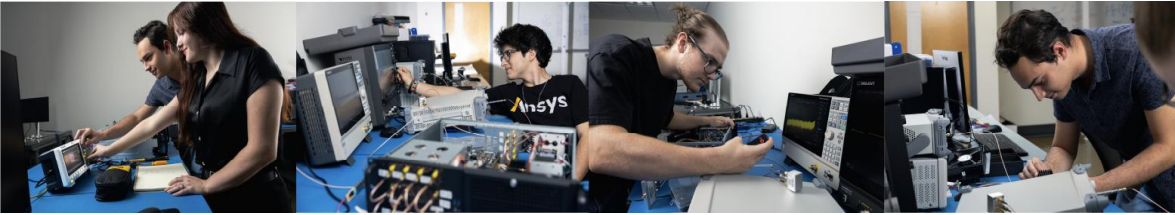
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Advanced Research Areas

FSI conducts research on lunar and Martian regolith, ISRU technologies, microgravity, radio astronomy, radar technologies, and more.

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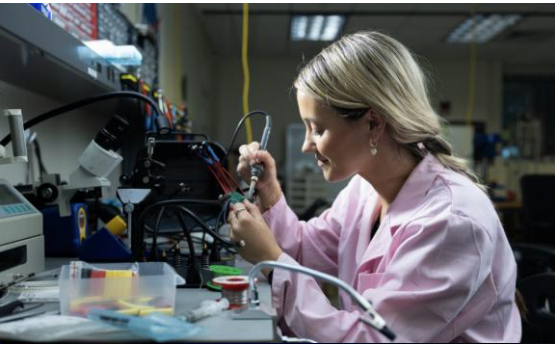
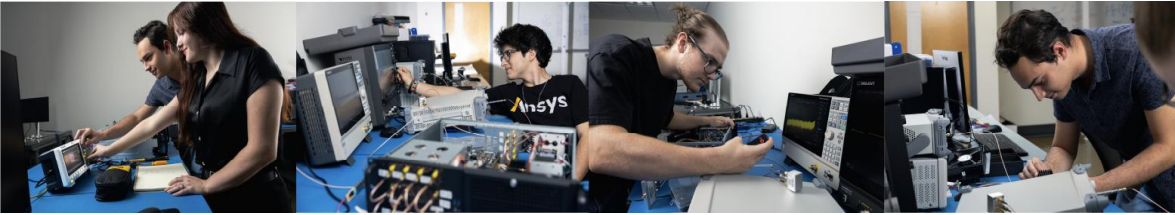
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Specialized Infrastructure

- FSI Labs provide students with hands-on research and engineering opportunities.
- The SPICE Fab Lab supports the fabrication and spaceflight rating of SmallSats.
- The Exolith Lab facilitates regolith testing, alongside advanced optical photothermal spectroscopy tools.
- The Robotics Lab supports Senior Design projects.
- FSI hosts the FLorida Space Grant Consortium and the S. Hawkin Center for Microgravity Research and Education.

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Community Engagement

FSI promotes space science through events like Space Week and Lunabotics, as well as through informal student programs, such as CubeSat workshops, to inspire future talent.



Impact and Achievements

Grants, Partnerships, and Student Involvement



Research Grants and Funding

UCF has secured NASA and NSF grants that support innovative space research and development projects.

- UCF ranks No. 2 in Florida for NASA funding and is in the top 7% nationally for NASA-backed research expenditures
- Over \$200M NASA funding received since 1991
- Over \$85M in expenditures for the management and operation of the Arecibo Observatory between 2018 and 2023

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- Department of Defense (DoD) funding for space research, supporting areas like hypersonics, optics, cybersecurity, materials science, and modeling & simulation.
 - The Space Force funds the U.S. Space Force University Consortium Research Opportunity for rapid cargo delivery via rockets.
 - The Air Force Office of Scientific Research (AFOSR) funds photonic technologies applied to space exploration and defense
- Growing funding from the space defense industry supporting radar technologies

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Florida University Space Research Consortium

- In partnership with UF, ERAU, FIT
- Facilitates NASA research grants in partnership with Kennedy Space Center.
- Strengthens Florida's aerospace ecosystem through joint projects with NASA and private sector partners.

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Student Engagement Programs

- FSI CubeSat program
- Hands-on research experiences
- STEM day participation
- K-12 outreach



Looking Ahead

Future Initiatives and Collaboration



Supporting NASA and Commercial Space Missions

- Upcoming Lunar-Vise mission to the Gruithuisen domes on the Moon.
- Demonstrating LEO and deep-space instruments and spacecraft built in UCF labs.

Growing the Civil and Defense Space Research Portfolio

- Grow emerging research programs, such as Aerospace Medicine and Space Photonics.
- Increase research and technology development for the defense community. the defense community.

Expansion of Research Facilities

- Expanding laboratory, manufacturing, and testing facilities to support advanced space research and innovation.
- Expanding access and operations of ground facilities.

Collaboration Invitation

Encouraging researchers, industry partners, and students to collaborate and contribute to space science.



Thank You For Listening

Feel free to ask me any questions during the
Symposium

Contact Options

FSI@ucf.edu

Planetary@ucf.edu

Partnerships@ucf.edu