

Space

Creating our space future together

At Arizona State University, we believe a deeply transdisciplinary approach is needed to create the social and systems-level solutions that will pave our way as an interplanetary species. We bring together top researchers and scholars from across the university to work with our students and commercial partners across sectors and disciplines to help us better understand and expand our reach into the universe.

Interplanetary Initiative

This pan-university effort brings disciplines and sectors together in new ways to address the biggest challenges and opportunities we face as a space-faring species. The initiative's Industry Alliance Program connects private sector members to programs across ASU, creating unique opportunities for workforce, product and business development.

MILO Space Science Institute

Dedicated to making deep space missions affordable and accessible, this mission academy supports development of a skilled workforce, a payload accelerator that guides teams from space-faring nations from concept and payload development to mission operations, and a mission project office that supports members through the entire process.

NewSpace

Leveraging ASU's capabilities in space science, technology, education and workforce development, ASU NewSpace leads the integration of the commercial space industry to ASU's faculty, facilities and students.

The ASU advantage

We're dedicated to accelerating achievement of our partners' goals with our responsive administrative support team, streamlining operations regardless of scale of effort. We connect our partners to technical expertise and talent and create an experiential learning environment in which we train the future leadership and workforce for the space industry.

- Access to thousands of experts working across disciplines.
- Core research facilities housing the latest equipment and tools.
- In-house capabilities for instrument testing and calibration.
- Rapid demos and prototypes.
- Mission design and mission control.
- A network of partners across government, academia and industry.
- Diversity of talent pipeline.
- Co-location of teams on site.

Orbital Reef, a partnership between Blue Origin and Sierra Space that includes a consortium of 15 universities led by ASU Interplanetary Initiative, was selected by NASA to design a commercially owned and operated space station in low Earth orbit (LEO).



120+

space industry partners

40+

instrument facilities and laboratories

25+

active space missions

300+

space investigators university-wide



Capabilities and transdisciplinary expertise

The ASU School of Earth and Space Exploration is home to more than 40 instrument facilities and laboratories, led by our faculty in fields including geological science, planetary science, astronomy, cosmology, astrobiology, astrophysics, exploration systems design and science education.

The Interplanetary Initiative lab takes the makerspace approach and extends it to full lifecycle space-flight hardware and software development. The Interplanetary lab provides access to specialized equipment, expertise and secured lab space to enable our partners to pursue projects that are otherwise out of reach due to limited resources.

Research spotlight

- Secure research capabilities (DFAR, SCIF).
- Basic and fundamental research to mission relevance and execution.
- Specialized knowledge of planetary and moon surfaces and interiors in our solar system and in exoplanetary systems.
- Analysis of the geochemical, isotopic and mineralogic properties of asteroidal and planetary materials.
- Electrical engineering for harsh environments.

Instrumentation spotlight

- NASA-certified flight instruments in space.
- Instrument and CubeSat design, integration and testing.
- Power electronics.
- Hyperspectral imaging.
- Human-AI teaming and robotics.
- Development of low-TRL technologies.
- Photovoltaic foundry.
- Neutron spectrometry.
- Mm-wave technology.
- SIMS.
- Nano-SIMS.
- Terahertz Design Lab.

Executive Master of Global Management in space leadership, business and policy

This cutting-edge curriculum is designed for industry, policy and military leaders looking for insight and connection to the space sector. The curriculum prioritizes industry immersion and focuses on modern practices, principles and case studies for corporate, startup, nonprofit and governmental organizations operating in space.

ASU Arizona State University

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for innovation**

ASU ahead of MIT and Stanford

— U.S. News & World Report, 7 years, 2016–2022

