

LASP ASTRO ACADEMY - RESEARCH - MICRO- CREDENTIAL

This program bridges academia (knowledge) with space research skills (know-how) by participating in the development of space missions under the mentorship of experienced LASP professional researchers and scientists.

This program provides research experience on a space mission under development or in flight. Participants will be trained in a science field associated with the mission, or one or more of the engineering disciplines required for space mission development. Engineering research includes projects in systems engineering, telecommunications, command and data handling, software, structures and mechanisms, thermal, electrical power distribution, guidance navigation and control, mission design and navigation, ground segments, operations, remote sensing or in situ payload technologies.

Science research includes projects in planetary & lunar science, space physics, space weather, astrophysics & solar physics, Earth & atmospheric science.

As part of a multi-disciplinary team on a development or in-flight mission, the participants work under mentorship of industry experts to perform independent research on space missions, preparing themselves for careers in the industry.

Eligibility

- CU Boulder students (including degree-seeking and nondegree/ACCESS)
- CU Boulder employees
- Other participants seeking to grow their capabilities in the space domain

Delivery Mode

In-person

Credit Status

Noncredit

Time to Completion

8–10 weeks

Fee

Yes

Requirements

Register for LASP Advanced Space Technology, Research, and Operations (ASTRO) Academy - Space Mission Research.

Must attend lecture series, team building activities, entrance/exit assessment, and mentoring sessions. Must contribute to an active satellite project going through elements of concept design, hardware prototyping, spacecraft flight hardware development, flight hardware integration, testing and flight operations.

Criteria

Participants can assemble and test ESD (electro-static discharge) sensitive systems in cleanroom environments. They can work with hazardous materials.

Participants can perform science research or engineering analyses to which they are assigned. They can communicate and represent their work through milestone reviews to a panel of subject matter experts.

Participants can navigate industry design standards and handbooks.

Skills

- Engineering
- Engineering analysis
- Engineering design
- Science analysis
- Systems engineering