

2010 Student internship opportunities with SSEL, Montana's Space Science and Engineering Laboratory



Paid summer internships are available for students from Montana campuses with the Space Science and Engineering Laboratory at Montana State University – Bozeman.

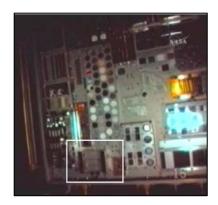
Up to three students, sophomores through seniors, from MSGC Affiliate campuses will have the opportunity to participate in the development of space science/engineering experiments at the Space Science Engineering Laboratory at the MSU – Bozeman campus. Students will receive complete training and mentoring from MSU students and SSEL staff experienced in space hardware design. SSEL programs to design, fabricate, test, and fly systems in the space and near-space environment include rockets, balloons, and satellites. These projects are described in more detail at: http://www.ssel.montana.edu.

This opportunity is designed to enable college students to participate in a missionlike team environment where students design, build, and fly space hardware. There will be approximately twenty students (mostly undergraduate students) working in the SSEL over the summer on a variety of group or individual projects.



SPACE SCIENCE AND ENGINEERING LABORATORY

In past summers, interns have: -- performed research on the physics of sound, devising an experiment to measure the speed of sound in the atmosphere and determine if and how it changes with altitude (up to the edge of space - 95,000 feet); -- learned about Space Weather, creating and testing a sensitive magnetometer to measure variations in the Earth's magnetic field caused by electrical currents flowing in space; -- built a communications transceiver for a satellite under development in the SSEL; -- worked as part of the Explorer 1 [Prime] satellite team – E1P is scheduled to launch in late 2010. If successfully launched, E1P will be Montana's first satellite placed into orbit.



Left: Frame capture of MISSE-6B taken during EVA on March 22, 2008 by astronaut Robert Behnken's helmet video camera upon deployment on the ISS. The white box highlights one of the SSEL designed and built experiments. Right: SSEL student engineer holds the Explorer 1 [Prime] satellite.



Important Details:

Program Dates: May 31st – August 6th, 2010 (must be able to participate for the entire program) **Eligibility:** Participants must: be a full-time registered student (previous two semesters/three quarters) at a Montana campus and must be intending to enroll full time for the fall, have a GPA of 3.0 or higher, have an interest in space science or space engineering

<u>Awards</u>: Students will receive a stipend of \$6,000. In addition, travel expenses will be provided for students from other campuses based on mileage for one round trip.

Application Procedures: A completed MSGC Intern application is required. Applications are available at http://spacegrant.montana.edu/Text/internships.html

This program announcement and the application may be found on the Montana Space Grant internship page: http://spacegrant.montana.edu/Text/internships.html. The priority deadline for applications is **January 29th**, **2010**.