Project Overview

In this project, 6 female engineering students will work as part of an interdisciplinary project team to design a high altitude balloon payload. The payload will carry a radiation sensor that is being developed at MSU as part of a radiation tolerant computing research effort sponsored by NASA. The payload will be designed to adhere to the interface guidelines from the High Altitude Student Platform (HASP) balloon launch program that is jointly administered by the NASA Wallops Balloon Program Office and Louisiana State University for a future flight. At the end of the summer program, the payload will be test flown on a MSGC BOREALIS balloon platform to an altitude of 100,000 feet.

The payload will be designed and prototyped during an 8-week summer program at MSU-Bozeman during June and July. The female engineering students participating in this program will be exposed to working on an interdisciplinary project team adhering to the principles of systems engineering.

Project Highlights

- 8-week summer program, June 6, 2011 – July 29, 2011
- All female, interdisciplinary design team
- $4,000 stipend for each participant
- Exposure to state-of-the-art research project being conducted at MSU
- Faculty mentors from EE, CS, M&IE, and Physics
- Weekly activities promoting female success within the engineering discipline

Who Should Apply

- Female engineering students (both undergraduate & graduate) who have completed two years of engineering education.
- US citizens (NASA requirement)

How to Apply

- Go to http://www.coe.montana.edu/ee/lermes/students.html
- Download the application and email to Brock LaMeres at lames@ece.montana.edu

Faculty Advisors

Dr. Brock J. LaMeres  
Electrical & Computer Engineering  
lames@ece.montana.edu

Dr. Angela Des Jardins  
Montana Space Grant Consortium  
desjardins@physics.montana.edu

Hunter Lloyd  
Computer Science  
hunterl@cs.montana.edu

Robb Larson  
Mechanical & Industrial Engineering  
rlarson@me.montana.edu

Key Dates

- Application Deadline: March 15, 2011
- Acceptance Notification: April 1, 2011
- Program Dates: June 6, 2011 - July 29, 2011

NASA/LSU HASP Balloon System  
BOREALIS Balloon Platform  
Radiation Sensor Developed at MSU