

Lunar Regolith Excavator Design Project Proposal Template

A university faculty advisor or student team may propose for up to \$5,000 to support a student team to design and build a lunar regolith excavator and for travel expenses to compete in the Lunabotics Mining Competition at Kennedy Space Center the week of May 25-28, 2010. Approved proposals will be funded on a first come/first serve basis by NASA through the National Space Grant Foundation. \$50,000 has been set aside for this purpose.

Design teams must include one faculty or industry advisor with a college or university affiliation and two or more undergraduate or graduate students. A group of universities may also work in collaboration on an excavator project entry. Multidisciplinary teams are encouraged. Collaborations between majority institutions and minority serving institutions are encouraged.

Proposals must be no more than 5 pages, single-spaced on standard 8 ½ x11 paper, no smaller than 12 point font and with one inch margins throughout. Proposals will be accepted electronically between August 1, 2009 and February 28, 2010. Proposals must be e-mailed to Susan Sawyer at Susan.G.Sawyer@nasa.gov. Proposals should be prepared by the following template:

Team Roster:

1. College/university and address
2. Name of faculty advisor(s), e-mail address, and phone number (office and cell preferred)
3. Names of students, e-mail addresses, phone numbers (cell preferred) and majors

Body of Proposal:

1. Plan and commitment to use a systems engineering approach to design, build, and verify a lunar regolith excavator.
2. Outreach plan
3. Budget request and plan
4. Schedule for completion of the excavator in time for competition
5. Collaboration with minority universities plan (optional, but encouraged);
6. Plan for multidisciplinary engineering team (optional, but encouraged);
7. Plan for recording video of the project (optional, but encouraged).
8. Commitment to compete in the Lunabotics Mining Competition at Kennedy Space Center during the week of May 25-28, 2010.