

**ANNOUNCING!
FIRST ANNUAL**

SPACE EXPLORERS

*Minnesota Science and Technology
Education Initiative (MSTE)*

TEACHER TRAINING

JULY 15-19, 2002

**UNIVERSITY OF MINNESOTA
TWIN CITIES CAMPUS**

What is Space Explorers, Inc.?

Space Explorers is a technology based program that includes Marslink, Moonlink, and NEARlink. All three programs are developed around actual NASA missions and allow students to retrieve actual spacecraft data. Students experience the excitement of the learning process and become involved in the creation of new knowledge. See the website at www.spaceed.org.

What is MSTE?

Space Explorers, Inc. is piloting the Minnesota Science and Technology Education Initiative (MSTE) to connect students and teachers with NASA's unique resources. MSTE's goals are to increase student performance in Earth and Space Science; to prepare students for jobs in the 21st century; to provide teachers with quality space science curriculum materials; and to increase technology integration in the classroom for enhanced student learning. MSTE is aligned with the National and Minnesota Science Standards and with the NASA Implementation Plan for Education. MSTE is a cooperative effort between the Minnesota Space Grant Consortium and Space Education Initiatives.

What do I get if I sign up for MSTE?

The goals and objectives of the MSTE project will be met through a program that includes the use of an Internet-based portfolio of Earth and Space Science instructional materials as well as a comprehensive professional development plan. The MSTE portfolio will include instructional materials for elementary, middle school, and high school that are based on the following programs and resources:

- K-3 Space Exploration
- NASA Educator Guides
- Plate Tectonics
- Lesson Plan Database (MARSlink, MOONlink, NEARlink)
- ISS Assembly Sequence
- Plate Tectonics
- NASA's Earth To Orbit Engineering Design Challenge
- CAP Educator Guides (Civil Air Patrol)

How do the Internet Missions work?

There are three phases for each of the Internet Missions included in the portfolio (Mars, Moon, NEAR).

- Phase 1: Teachers will be provided with lesson plans, student activity guides, study guides, and assessment tools for each of the MSTE educational missions. This phase prepares students for the rest of the program by introducing and familiarizing them with a number of Physical Science and Space Science concepts.
- Phase 2: Students take on the role of the mission team and simulate the launch and control of the spacecraft via the Internet. The team interacts live with a Mission Controller from Space Explorers, Inc. who assists them in their mission.
- Phase 3: Students are given access to the actual data accumulated by the real-life spacecraft. They receive the tools required to perform preliminary research on the data and have the opportunity to collaborate with student teams from around the world.

How much does MSTE cost?

The cost for the Internet link from Space Explorers, Inc. is \$250 training stipend for attending the week-long Space Academy! In addition, access to Space Education Initiatives educational resources is free after you have completed the MSTE training.

What is the schedule for MSTE?

The training is open to K-12 teachers who want to involve their students in innovative Internet Earth and Space science adventures. Classes will meet from approximately 9 AM to 3 PM each day (with a break for lunch) in Lind Hall, 107, on the East Bank of the University of Minnesota. Please call the Minnesota Space Grant Office for more information and directions at **612-626-9295** or contact us by Email at **mmsgc@aem.umn.edu**. See our website at *www.aem.umn.edu/mmsgc!*

How do I register for MSTE?

MSTE is free. Complete the following form and send to the address below by June 1, 2002. Apply early because space is limited to the first 25 registrations! We will send registration confirmation and more detailed information out to participants after June 15th.

Name _____ School/Grade Level _____

Address _____

Phone _____ Email _____ Fax _____

I am interested in credit options: yes

Mail to: MnSGC Office
Dept. of Aerospace Engineering
University of Minnesota
107 Akerman Hall
110 Union St. SE
Minneapolis, MN 55455