

Explore! Investigate! Invent!

How Science Inspires Engineering

2012 Summer Institutes

Museum Institute for Teaching Science

Weekdays, July 9th-20th

For Upper Elementary and Middle School Educators



A minds-on, hands-on professional development experience that will provide you with scientific knowledge, classroom investigations and a network of resources.

Investigate... the connections between science and engineering, and get ready to meet the forthcoming science and engineering frameworks.

Learn... how to present the engineering design process to your students and how it relates to science inquiry.

Explore... examples of how science has provided engineers with the foundations to create solutions to real world problems such as flight, machine design, building practices and the development of items you use every day.



Offered in six regions of Massachusetts and southeastern New Hampshire

Participate in content and skill development sessions taught by professional educators and scientists at each partner organization. Daily activities include indoor inquiry-based classroom experiences and outdoor field experiences. Take home investigations you can use in your classroom and a teaching resource kit!

Berkshire Region: Berkshire Museum, Flying Cloud Institute, Housatonic Valley Association, Marmalade Productions

Boston Region: Harvard Museum of Natural History, Learning by Design, New England Aquarium, Zoo New England

Central MA Region: Catch the Science Bug, EcoTarium, Mass Audubon Wachusett Meadow Sanctuary, Tower Hill Botanic Garden

Merrimack Valley Region: American Textile History Museum, Mass Audubon Drumlin Farm Wildlife Sanctuary, Tsongas Industrial History Center

Southeast Region: Buttonwood Park Zoo, Lloyd Center for the Environment, Mass Audubon Stony Brook and Oak Knoll Wildlife Sanctuaries, National Marine Life Center

Southern New Hampshire: Amoskeag Fishways Learning and Visitor Center, Beaver Brook Association, New Hampshire Fish and Game

- Learn to use inquiry-based, hands-on methods in your classroom
- Find out about resources at education institutions in your region
- Explore how scientists and engineers draw from the natural world to make things you use every day such as glue, Velcro and LED lights.
- See how beavers engineer their dams and inspire human dam construction...*and lots more!*

Earn 60 PDPs, or 90 PDPs and 4 graduate credits

Course Fee: \$300 (discounts for teacher teams); additional fee for graduate credit

Registration Deadline: June 6th, 2012 (Call for space after deadline)

**For a complete brochure or to register: visit www.mits.org
email mits@mits.org or call 617-328-1515**

Museum Institute for Teaching Science

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