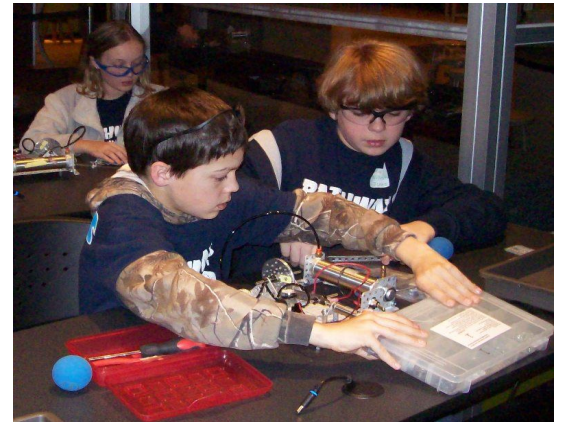




TEACHING MATH AND SCIENCE THROUGH ENGINEERING

Middle and high school teachers are introduced to 3D Computer Aided Design software and GEARS Rapid Prototyping Kits. Teachers will use CAD software, a real world application of Math ACOS objectives, to reverse engineer a mechanical part and create a 3D model. Teachers will then use industry-specific rapid prototyping models to apply Physical Science concepts to an engineering design challenge.



During the workshop teachers will have access to laptop computers loaded with SolidWorks 3D and CAD (Computer Aided Design) Academy software and GEARS Rapid Prototyping Kits. Additional supplies include Vernier calipers, protractors, and data collection worksheets. Key representatives from the aerospace, chemical and mechanical engineering fields will participate in the workshop as a resource to provide teachers with a real world application to the classroom lessons. In addition, teachers will be able to download two online information packets to assist them with implementing the Explore TEC experience in the classroom.

Teaching Math & Science through Engineering will address the following ACOS standards:

Grade 6, Math: 2, 3, and 9

Grade 7, Math: 1, 7, and 8

Grade 8, Physical Science: 1.0, 1.1, 8.0, 8.1, 9.0, 9.1, 10.0

Grades 9-12, Geometry: 12

Grades 9-12, Physical Science: 7.0, 7.1, 7.2, 7.3, 7.5, 12.0

Contact Candice Goins, Education Coordinator. 251.208.6818 or cgoins@exploreum.com