

Explorations in **STEM**

Session 1: Engineering Amusement

Explorations in **S**cience **T**echnology **E**ngineering and **M**ath for Students who are Blind and/or Visually Impaired

Who: Students Who Are Blind/Visually Impaired in Grades 7-12

Where: Missouri School for the Blind (MSB)
3815 Magnolia
St. Louis, Missouri 63110

When: July 7– 17, 2015 (9 days)

What: *Explorations in **STEM**: Engineering Amusement* is an exciting, interactive opportunity for students to work alongside our experienced **STEM** staff to develop skills in teamwork and scientific inquiry which will allow them to increase their independence while participating in laboratory-based classes. *Explorations in **STEM**: Engineering Amusement* provides an engaging program for students to learn **STEM** concepts utilizing MSB's state-of-the-art computer and science laboratories which are designed to increase access and independence for students who are blind or visually impaired. During this session students will explore the Science, Technology, Engineering and Mathematics behind the exciting world of amusement parks. Imagine you've bought your ticket and boarded a roller coaster. Now you're barreling down the track at 60 miles per hour, your heart is pounding and your stomach is in your throat. Would you be surprised to know that the designers of the roller coaster have carefully crafted this thrill ride to be just that, but you're actually in less danger than you face playing sports or riding a bike. Amusement park rides use the laws of physics, math, and technology to engineer your experience to *simulate* danger.

During *Explorations in **STEM**: Engineering Amusement* students will explore how concepts of **STEM** affect amusement park ride design. Students will learn the ups and downs of how their favorite amusement park attractions really work as we explore the answers to questions like "Why don't you fall out when the ride goes upside down?" Students will design their own thrill rides, learn how engineers optimize traffic flow, and even concoct their own amusement park confections. One entire day will also be spent exploring Six Flags—St. Louis. During *Explorations in **STEM**: Engineering Amusement* students will also get to experience dorm life and exciting evening activities throughout the week.

Costs: *Free.* Transportation, activities, room and board are all provided *FREE* of charge.

How: Just complete the registration form found on the MSB Web site and return it to MSB by May 15, 2015.

If you have further questions or need additional information, please contact Joy Waddell, Assistant Superintendent at 314-776-4320, ext. 1140, or via e-mail at joyce.waddell@msb.dese.mo.gov