**STEPS Engineering Camp**

**Grades 6-8**  
Boys: June 10-15 or July 15-20  
Girls: June 17-22 or July 8-13

**Grades 9-12**  
Boys: June 17-22 or July 22-27  
Girls: June 24-29 or July 15-20

$525

Science Technology Engineering Preview Summer Camp (STEPS) is a one-week introduction to the world of technology and engineering.

Campers participate in:

- hands-on activities that give them an understanding of what engineers do
- science and engineering topics such as robotics, clean manufacturing, materials/metallurgy, team building, making biofuels and more!
- group presentations of their project
- exposure to many types of engineering to learn about careers

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**Mining and Explosives Engineering Institute**

**Grades 10-12**  
June 24-27

$450

Students participating in this camp will:

- learn about the science behind explosives
- learn how engineers apply explosive forces to break rock to unearth precious minerals from the ground
- explore the world of math, physics, and chemistry through explosives
- be given a safe, up close and personal view of mining and explosives engineering by trained explosives experts

Field trips to watch blasts are included in this exciting camp experience!
Space Adventures! Camp  
Grades 6-8  July 15-20  
Grades 9-12  July 22-27  
$525  
Students in this camp will explore:  
- the birth of the universe and life cycle of stars  
- relativity, time travel and black holes  
- star mythology and basic astronomy  
- space engineering  
Students will make “alien slime” and build and launch their own model rocket. Field trips to the SD Air & Space Museum and stargazing are included!

Socket to Me!  
Computer Camp  
Grades 7-10  
Boys: June 3-8  
Girls: June 10-15  
$525  
This camp provides a hands-on computer science and computer engineering experience.  
Students will learn about:  
- computer disassembly and reassembly  
- PC maintenance  
- basic programming and Web programming  
- basic electronics, hardware and software  
- robotics  
- cell phone applications

Chemical and Biological Engineering Institute  
Grades 10-12  July 22-26  
$550  
Students in this camp will learn:  
- chemical process design  
- how to convert biomass into products  
- biofuels  
- biopharmaceuticals  
- other bio-based products  
- chocolate processing for consumption  
- biomedical engineering and biomaterials  
This hands-on program will give students experiences to help them make decisions about pursuing chemical engineering in college. This is a great pre-college experience!

Super Science Honors Institute  
Grades 6-8  July 8-13  
Requirement: 3.0 GPA and Application Essay  
$525  
Students get critical exposure to physical sciences at an early age in this academic camp. Students with a 3.0 or better GPA may apply for acceptance into the program. Students will explore:  
- Physics – impulse and momentum, phases of matter and catapults  
- Earth Science – geology of the Black Hills, water quality and meteorology  
- Astronomy – Mars, the Hubble telescope, NASA, comets and meteors  
- Chemistry – safety and hands-on experiments  
For more information, visit:  
www.sdsmt.edu/learn  
or call  
(605) 394-2693

Youth Geology Field Camp  
Grades 6-8  June 3-6  
$425  
Grades 9-12  June 10-15  
$550  
This camp provides an understanding of the earth. Through daily field trips, participants will learn about:  
- minerals, rocks and fossils  
- basic geology  
- understanding topographic and geologic maps  
- water, landslides and earthquakes  
- volcanoes and magmas  
- geology of the Black Hills  
- the creation of mountains and landforms  
- living the life of a field geologist  
Field trips include the Museum of Geology, Black Hills Institute, Mt. Rushmore and the Badlands.  
This is truly a field camp experience!

Forensics and Materials Engineering Institute  
Grades 10-12  July 8-12  
$550  
Explore the exciting world of forensics engineering and material analysis in this camp!  
Hands-on laboratory experiments, including:  
- Introduction to materials –metals, polymers, composites, nanomaterials  
- Building a Samurai sword – minerals and metals processing  
- Metal working – heat treating, blacksmithing, welding, casting  
- Materials testing – impact & tensile strength testing  
- Materials characterization – optical and scanning electron microscope  
- Forensic engineering – investigate how materials fail  
Students will also go on field trips, including a visit to a local metals mine and to local industries to learn about material applications.