

About the SME Education Foundation

The Society of Manufacturing Engineers Education Foundation (SME-EF) advances manufacturing education through youth programs and scholarships. Science, Technology, and Engineering Preview Summer (STEPS) camps, now known as the Gateway Academy program, were created in an effort to fill the pipeline with skilled manufacturing workers. Through 2008, more than \$4.5 million has been invested to inspire more than 5,700 young people to explore technical careers. For more information, visit www.smeef.org. For a sneak peek into the world of manufacturing, visit www.manufacturingiscool.com.

About Project Lead The Way®

Project Lead The Way® (PLTW) is a national not-for-profit organization that provides engineering and biomedical sciences curricula for more than 250,000 students in nearly 3,000 middle and high schools in all 50 states and the District of Columbia. PLTW's Gateway To Technology™ engineering program is the curriculum used for the Gateway Academy. For more information, visit www.pltw.org.

For more general information on the Gateway Academy program, contact www.pltw.org or www.smeef.org.

For information about the White Bear Lake Area Schools Gateway Academy, contact:

Dan Rossiter, 651-653-2961,
djross@wbl.whitebear.k12.mn.us

Paul Meuwissen, 651-653-1580,
pwmeuw@wbl.whitebear.k12.mn.us



Sessions:

July 12-16
(Course 2900.400)

July 19-23
(Course 2900.401)



Register through White Bear Lake Area Schools Community Services
whitebearcommunityservices.org

GATEWAY ACADEMY



Summer Camp for TOMORROW'S ENGINEERS



Sessions:

July 12-16
July 19-23

Gateway Academy is a joint venture of the Society of Manufacturing Engineers Education Foundation and Project Lead The Way.™



EDUCATION FOUNDATION



Inspiring Students

Gateway Academy is a day camp summertime experience designed to inspire students to learn more about science, technology, engineering, and math.

Campers work together using leading-edge technologies to sample such disciplines as robotics, aeronautics, and computer design.

The SME Education Foundation (SME-EF) has offered Science, Technology, and Engineering Preview Summer camps to secondary school students since 1997. Now the SME-EF is partnering with Project Lead The Way® (PLTW) to offer the Gateway Academy program throughout the United States.

Jump-Starting Learning

In 2008 alone, more than 3,000 middle school-age girls and boys turned on to science, technology, engineering, and mathematics (STEM) learning at a day camp-format Gateway Academy, in 170 schools in 26 states. Most campers went on to enroll in those schools' Gateway To Technology™ (GTT) program, PLTW's successful engineering curriculum for seventh, eighth, and ninth graders. The project-based problem-solving activities of GTT in turn deliver the fundamentals of STEM subjects, jump-starting middle schoolers for the academic rigor that lies ahead in high school and beyond.

At each Gateway Academy, instructors certified to teach PLTW courses provide expert instruction in small-group settings. Campers work together using leading-edge technologies to sample disciplines such as robotics, aeronautics, and computer design.

Opening Minds to Engineering

Gateway Academy opens a pathway for students that is based on their curiosity about the way things work, and it's a place for girls and boys from all backgrounds to discover and follow their interests in STEM fields.

Gateway Academy is open to the involvement of families, schools or school districts, businesses, and communities.



Photos in this brochure are from Gateway Academy programs at Sanford Middle School, Minneapolis, Minnesota, and Hanna-Westside Extension Campus, Anderson, South Carolina.

GATEWAY ACADEMY



Who Can Be a Gateway Academy Camper?

Gateway Academy campers are:

- Entering grades six, seven, or eight during the upcoming school year.
- Into having fun, learning something new, and making friends.
- Curious about the way things work.
- Attending a school district that offers the PLTW engineering pathway.
- Interested in STEM careers.

*“Awesome!
I love this camp!”*



What Do Gateway Academy Campers Get to Do?

The nonstop activity begins each day with icebreakers and team-building fun like this:

- Make a human knot.
- Build a desert shelter.
- Role-play plane-crash survival.

Campers work separately and together on cool projects like these:

- Create a spacecraft strong and light enough to land an “eggstronaut” safely.
- Build and race a car that runs entirely on solar energy.
- Fire missiles from a catapult made with a mousetrap.

Throughout the session, campers solve big problems using awesome technology with such challenges as:

- Make a remote-controlled robot out of Fischertechnik parts, and program it to navigate a maze in a race against the clock.
- Use sketching and modeling software to turn raw materials into wearable jewelry prototypes and present your designs like the pros do.
- Design, build, and test a rocket for maximum possible altitude and perfect landing, with the help of Autodesk® Inventor 3D modeling software.



“These opportunities for children ... open the doors to new possibilities. The exposure definitely broadens their scope.”

Why Be a Gateway Academy Camper?

Gateway campers say:

- “I made a lot of friends.”
- “I really like this program. I learned a lot.”
- “The coolest part is the people here. The teachers have their own specialties.”
- “Awesome! I love this camp!”

Parents agree:

- “My child clearly was challenged to use problem solving and mechanical skills.”
- “It is obvious that you run very high-quality camps. Thank you for a great experience!”
- “These opportunities for children ... open the doors to new possibilities. The exposure definitely broadens their scope.”
- “My daughter wants to do it again!”



GATEWAY ACADEMY
EDUCATION FOUNDATION
sme

ACADEMIC CAMPS

Futura Spanish Soccer Camp

Grades 2-5

Fútbol! Soccer in...SPANISH!
A theme-based Spanish Summer Day CampJoin in the fun of learning Spanish while playing soccer! For complete details see page 46.

2466.412	4 sessions	Mon-Th
	July 12-15	9-11 am
	\$109	Central Gym A

Gateway Academy: Pre-engineering Camp

Grades 6-8

Gateway Academy is a week-long engineering camp in which campers work together in a fun, exciting environment. Leading-edge technologies and hands-on activities will be used to sample such disciplines as robotics, aeronautics, rockets, eco-design, manufacturing, alternative energy, and computer design. Boys and girls interested in learning how things work, or who are interested in careers in science, technology, engineering, and mathematics are encouraged to enroll.

Certified Project Lead the Way instructors will provide expert instruction aligned to the district's PLTW pre-engineering pathway. Field trips will include visits to the Fab Lab at Century College and the Science Museum of Minnesota. Participants are asked to bring bag lunches each day.

Dan Rossiter and Paul Meuwissen

2900.400	5 sessions	Mon-Fri
	July 12-16	9am-3 pm
	\$175	SPMS Room
2900.401	5 sessions	Mon-Fri
	July 19-23	9 am-3 pm
	\$175	SPMS Room

Camp Invention

For students entering Grades 1-6

Unleash the creative genius in your child! A hands-on science and creativity day camp so fun, they won't even realize they're learning! Build your own motorized pet, explore games from ancient cultures, discover the beauty of tessellations and fractals, save a virtual world and become an entrepreneur in the avatar marketplace, and use real tools to take apart old appliances and make your own invention.

Students participate in 5 exciting modules taught by local educators each day. Camp Invention is a nationally-acclaimed STEM enrichment program presented in partnership with the United States Patent and Trademark Office.

July 12-16, Otter Lake Elementary School
M-F, 9 am-3:30 pm

To register: 1-800-968-4332 or
www.campinvention.org

Registration fee of \$215 includes a camp T-shirt

Save \$25! Register with a friend for only \$190 each!

Watch Me Draw Clay And Canvas Art Camp!

Grades K-5

A fantastic week of clay creations and painting on canvas! The first half of camp will feature the use of animator's clay and air-dry clay as we create colorful jungle animals beautiful enough to put on display! The second half of the camp we will take our painting skills to a new level and create several masterpieces on canvas! We will use acrylics to make a different summer themed painting each day. All levels welcome!

2727.400	4 sessions	Mon-Th
	Aug 9-12	10 am-Noon
	\$90	Lincoln 101