

Worcester Middle School Students Summer Science, Technology, and Engineering Program Guide



Camp Reach

This award-winning summer residential program is for Massachusetts girls entering 7th grade who are interested in learning more about careers in engineering and technology. The two-week program includes hands-on workshops, a design project for a community organization, field trips, recreational activities, and follow-up programs during the academic year. Application deadline: April 15

July 11–July 23

Cost: \$795

Audience: Girls, grade 7

Location: WPI

Website: www.wpi.edu/+summer

NEW Advanced Robotics

Already know the basics and ready for a challenge? Use your knowledge of LEGO® MINDSTORM platform to take it to the next level. Spend a week with WPI faculty and robotics students exploring robotic construction, programming, and competition. Application deadline: May 30

August 2–6 (residential) grades 6–8, **Cost:** \$795

August 9–13 (9am to 4pm) grades 4–6, **Cost:** \$495

Location: WPI

Website: www.wpi.edu/+summer

Girls & Math

An exciting way to experience math in a half-day weeklong program. Join other girls and learn that mathematics is in everything! Led by professional women mathematicians, this year's program focuses on topics ranging from hidden secrets about numbers and probability, to numerical bases, exponents and logarithms, and geometry. Emphasis will be on problem solving—hands-on applications with games and fun projects, too.

Application deadline: May 30

August 2–6, 9am–12:30pm

Cost: FREE

Audience: Middle school girls, grades 6–9

Location: WPI

Website: www.wpi.edu/+summer

NEW Destination Imagination@WPI

All the fun and creativity Destination Imagination offers is at WPI this summer! Participants will work on team building, creative problem solving, theater arts, engineering, and construction—all in a fun environment with 'no interference.'

Session I: July 12–23, 9am to 4pm (middle school)

Session II: July 26–August 6, 9am to 4pm (elementary)

Cost: \$595

Audience: Elementary and middle school, grades 3–8

Location: WPI

Website: www.wpi.edu/+summer

Intellect Quest

A program for kids who need an intellectual challenge. Intellect-rich and fun activities based on the best of Mass Academy's highly acclaimed SPLISH Day. Lots of science, math, robotics, and art. Applications are due April 30 and each session is limited to 35 participants. This program is held at the Massachusetts Academy of Mathematics and Science, near the WPI campus. It does not include lunch.

July 12–16 (middle school)

July 19–23 (elementary)

Cost: \$290

Audience: Elementary and middle school, grades 5–8

Location: WPI

Website: www.wpi.edu/+summer

Junior Robotics Challenge

This weeklong day program is designed to inspire and excite its participants as they explore science and engineering in a fun and inventive atmosphere. It teaches the basics of designing, building, and programming using the LEGO® MINDSTORMS® platform. The student-designed robots face off in a Friendly competition on the final day.

July 11–16, 9am to 4pm (elementary)

July 26–30, 9am to 4pm (middle school)

Cost: \$395

Audience: Grades 4–8

Location: WPI

Website: www.wpi.edu/+summer

Math Counts

This program focuses on introducing middle school students talented in mathematics to MATHCOUNTS® problem-solving techniques. (MATHCOUNTS® is a national math enrichment, coaching, and competition program that promotes middle school mathematics.) Sessions focus on combinatorics, basic probability, algebra, and geometry. Application and letter of recommendation from math teacher are due May 30.

August 9–13, 9am to 12:30pm

Cost: \$195

Audience: Middle school, grades 6–8

Location: WPI

Website: www.wpi.edu/+summer

Crime Scene Science

Learn the science behind crime scene investigations. This year we have three new crimes to explore: arson, poisoning, and counterfeiting. Process evidence, interview witnesses/suspects, use software to create composite pictures, learn to lift fingerprints, examine trace evidence under the microscope, and more.

Session I: July 11–15, 9am to 4pm

Session II: August 2–6, 9am to 4pm

Cost: \$495

Audience: Middle school, grades 6–8

Location: WPI

Website: www.wpi.edu/+summer

Engineering Challenge

June

Spend two days at QCC competing in engineering-related Challenges for prizes along with other team members from your school.

Qualifying Students: Boys and Girls, Free to all participants

Location: Quinsigamond Community College (QCC)

Contact: Betty Lauer e-mail: blauer@qcc.mass.edu

Web: See www.futuregeeks.org as more info. becomes available

BioDiscovery

This amazing program is for middle school girls interested in science. Learn about bones, bacteria, cells, and more. Work on a bioscience research project with college students from all over the country in a 1:1 mentor relationship. Sponsored by an NSF grant, this program is limited to eight participants.

Application deadline: April 30

June 28–July 2

Cost: FREE

Audience: Middle school girls (pref. given to Worcester residents)

Location: WPI

Website: www.wpi.edu/+summer

NEW Robotics Summer Camps

August

Boys and girls will spend two weeks participating in hands-on project-based activities focused on building their own robot to accomplish various tasks. Exploration of related careers will involve field trips to businesses to see robots in action and local high school/college program offerings.

Qualifying Students: Boys and Girls

Location: Quinsigamond College (QCC)

Contact: Betty Lauer e-mail: blauer@qcc.mass.edu

Web: See www.futuregeeks.org as more info. becomes available

Adventures in Veterinary Medicine (AVM)

What does it take to be a veterinarian?

Come to Adventures in Veterinary Medicine and discover if this exciting career is right for you.

The application is available on the website, along with additional information.

Qualifying Students: Grades 7 & 8. High school, college, and adult sessions also available.

Location: Tufts Cummings School of Veterinary Medicine, North Grafton

Contact: (508) 839-7962 or e-mail AVM@tufts.edu

Web: www.tufts.edu/vet/AVM

EcoTarium Summer Camp

Multiple sessions

Fill your summer with science and nature investigations.

Explorations and adventures are on the agenda at the EcoTarium's popular Summer Discovery Camp for children ages 7-14, one of the longest-running summer day camps in the United States.

Qualifying Students: Ages 7 – 14

Location: EcoTarium

Contact: Patricia Fields pfields@ecotarium.org

Web: <http://ecotarium.org/activities/summercamp/>

Painting With Your Digital Camera

Explore nature through the lens of a camera. Learn the basics of photography while learning about nature. We will hike and explore the sanctuary all the while seeking out interesting subjects for our photo show. Participants will need to bring their own digital camera for this week.

Qualifying Students: Ages 8 - 14

Location: Broad Meadow Brook

Contact: icarlin@massaudubon.org

Web: www.massaudubon.org/Nature_Connection/Sanctuaries/Broad_Meadow/camp.php

Natural History Day Camp

Spend the day outside hiking and exploring/studying the natural world.

Qualifying Students: Ages 4.5 - 16

Location: Broad Meadow Brook **Contact:** icarlin@massaudubon.org

Web: Same as "Painting with your Digital Camera"

Nature in Art

For artists and the soon-to-be artists. Spend a week working with several different mediums as we explore the Sanctuary and admire its beauty through our artistic creations. All materials will be provided.

Qualifying Students: Ages 10 - 14

Location: Broad Meadow Brook

Contact: icarlin@massaudubon.org

Web: Same as "Painting with your Digital Camera"

Technology Academy for Girls

2 sessions: July and August

Girls will spend three weeks participating in hands-on project-based activities focused on technology-related careers. Girls can choose among three tracks: Building their own PC, Developing Computer Programs, and Inventing their own Robot. Girls' exploration of related careers will involve field trips to businesses to see the technology in use and local college program offerings.

Qualifying Students: Girls, Free to all participants

Location: Quinsigamond Community College (QCC)

Contact: Betty Lauer e-mail: blauer@qcc.mass.edu

Web: See www.futuregeeks.org as more information becomes available

Junior Horticultural Volunteer Program

A volunteer leadership opportunity for teens interested in gardening, the outdoors, and working as mentors with children.

Location: Tower Hill Botanic Garden Boylston

Contact: Ann Marie Pilch, Youth Education Coordinator 508-869-6111,

x 120apilch@towerhillbg.org

Web: www.towerhillbg.org

