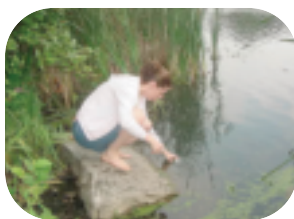


Wunders™

Women Understanding New Dimensions in Engineering Related Science

July 12-18, 2009, girls entering 9th and 10th grades
July 12-18, 2009, girls entering 11th and 12th grades

A seven-day, summer residential program for soon-to-be freshmen, sophomores, juniors, and seniors interested in science, mathematics, and engineering.



The Program

WUNDERS is a hands-on exploration of engineering, math, and science for young women. You'll learn more about potential careers in these areas by engaging in labs facilitated by a dedicated team of WPI faculty and students. Although labs change every year to accommodate repeat participants, past topics have included comparing the quality of water from various sources and testing different techniques for making it potable; building a robot that responds to sound; and learning about the process of making artificial skin.

Did you brush your teeth this morning?

A chemical engineer made your toothpaste.

Did you email or IM a friend today?

Computer and mechanical engineers made that possible.

Engineering is solving problems using math and science. Engineers do many exciting things, such as keeping our water clean and safe, designing space crafts to explore the universe, designing toys and games, and discovering new ways to treat diseases. It's impossible to go through a single day without using something an engineer has helped create.

Participants of the WUNDERS program work in teams on a weeklong engineering project. Last year's project involved designing a device that would assist someone who has a physical impairment. Each team then presented their results, using CAD and Powerpoint drawings, to an audience of their peers. This year's project will focus on a different aspect of how engineering helps people.

WUNDERS isn't all work! The evenings are filled with opportunities for fun with your fellow participants, who come from all over the country. Bowling, a scrapbooking party, karaoke, and a chance to drive a Segway were highlights of past years' evening activities.

A schedule of activities will be provided to successful applicants. We think you'll find the WUNDERS program to be a once-in-a-lifetime learning experience!



Office of Women's Programs
100 Institute Road
Worcester, MA 01609-2280

Worcester Polytechnic Institute

Who Should Apply?

WUNDERS is designed for girls who will be high school freshmen, sophomores, juniors, or seniors during the 2009–10 academic year. Applicants should excel in math and science and be highly motivated to learn about careers in math, science, and engineering.

Not sure if you are interested in engineering? Take our quiz to find out your “EQ” (engineering quotient).

☐ **I like to solve problems and be creative.**

Engineering is all about using science and math to solve problems. Engineers use their skills to make things work better, faster, and more economically.

☐ **I want to make the world a better place in which to live.**

Engineers design wheelchairs, cell phones, infant monitors, artificial organs, computer software, and all kinds of innovations that improve our lives.

☐ **I do well in my math and science classes.**

If you enjoy math and science, you most likely have an aptitude for engineering.

☐ **I like to work as part of a team.**

Engineers typically work with other engineers or other experts to solve problems in a group setting. Most projects are built around teams of people who work together to find the best solution.

☐ **I want an education that will let me keep my options open.**

With an engineering background, you can go into management, teaching, research, consulting, business, industry, government, or marketing. As an example, the medical school admission rate for students with engineering degrees is over 80 percent, compared with a national average of 48 percent.

☐ **I want to combine my interest in science with my interests in music or history.**

A strong background in science can be combined with interests in other fields, such as the humanities and arts, to make you even more successful in the engineering world.

☐ **I want a job that will let me balance career and family.**

A recent study showed that 16 percent of women scientists and engineers were employed part-time—nearly 42 percent cited family responsibilities as the reason. Because women have been underrepresented in this field, employers have developed mentoring and advanced studies programs, as well as flexible work schedules, to help attract women to technological careers and to promote women’s professional growth.

Tuition

The tuition of \$500 includes room, board, materials, and a program T-shirt. Scholarships for tuition and travel are available on a needs-basis only (see application form). Tuition is due at time of acceptance and is nonrefundable. A \$25 nonrefundable application fee is required with application. If accepted into program, it will be applied toward tuition. Although participants may want to bring additional spending money to the program, there are no other required fees.

To Apply

- Complete this half-page application and write your essay on the back page—or download it at wpi.edu/+wunders.
- Have a math or science teacher complete the half-page recommendation form.
- Submit a copy of your high school transcript. *Standardized test scores (PSAT, SATs, ACTs) are not required, but may be submitted.*

Complete applications must be received by March 28, 2009. Each program is highly selective and limited to 20 participants.

For Information

Write

WPI WUNDERS Program
Office of Women’s Programs
100 Institute Road
Worcester, MA 01609-2280

Phone

508-831-5819

Fax

508-831-5818

Email

wunders@wpi.edu

Browse

www.wpi.edu/+wunders

WUNDERS Application

Please complete this application form, including the essay on the reverse side, and return it along with a copy of your transcripts. Applications must be received by March 28, 2009.

Name _____ D.O.B. _____

Street Address _____ City _____

State _____ ZIP _____ Phone _____

Email _____ Parent(s)/Guardian(s)/Name(s) _____

School Currently Attending _____

Grade Entering in 2009–10: ☐ 9th ☐ 10th ☐ 11th ☐ 12th

Ethnic Background: ☐ African American ☐ American Indian ☐ Asian ☐ Caucasian ☐ Latina ☐ Other

How did you hear about this program: ☐ Website ☐ Teacher ☐ Guidance Counselor ☐ Friend ☐ Other _____

Limited scholarships for program tuition and travel are available based on demonstrated financial need. If you wish to be considered for financial assistance for WUNDERS, please complete this financial aid information. All information provided on this form will remain confidential.

Amount of tuition aid requested \$ _____ (Note: Program tuition is \$500)

Amount of travel aid requested \$ _____

Adjusted gross income as reported to the Internal Revenue Service (IRS) \$ _____

Refer to your 2007 or 2008 Federal Tax Return (On form 1040, adjusted gross income is on line 34; on 1040A it is on line 21; on 1040EZ it is on line 4).

The Worcester Public Schools is not responsible for or connected with any aspect of this program and participation in this program is the sole decision and responsibility of the parent/guardian.

Teacher Recommendation (WUNDERS Application)

(Only a teacher may complete this form.)

Please return this form to WPI, Office of Women's Programs, 100 Institute Road, Worcester, MA 01609-2280.

This form may also be downloaded at wpi.edu/+wunders. Recommendations must be received by March 28, 2009.

Teacher Name _____ School _____

Name of student you are recommending _____

How do you know this student? _____

Please rate this student based on the following scale:

- ☐ One of the best students I have taught
- ☐ An excellent student with great potential
- ☐ A solid and consistent performer
- ☐ An adequate student
- ☐ Would not recommend this student

Please share any additional comments regarding this student on the back side of this form.

Signature _____ Date _____

Essay Form

Please explain in an essay (200 words or less) why you would like to attend the WUNDERS program.
(You may use this form or submit on a separate sheet)

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Additional Comments from Teacher: _____

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