

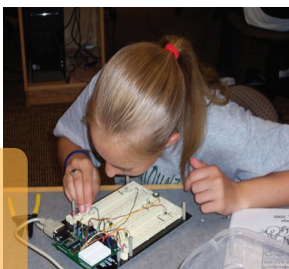
# EDUCATING GIRLS FOR ENGINEERING

New for 2019!

INTRODUCING THE UNION COLLEGE EDGE PROGRAM DAY CAMP! THIS DAY CAMP IS MODELED AFTER OUR HIGHLY SUCCESSFUL, 15-YEAR-RUNNING RESIDENTIAL PROGRAM.

The EDGE Program combines real-life college learning experiences with activities intended to interest girls in studying science and engineering in college and undertaking a career in one of those disciplines. More broadly, it is EDGE's intent to help redress the serious and continuing under-representation of women in engineering. A unifying theme of "Toys and Tools for Children with Special Needs" is used to illustrate the humanitarian aspects of engineering and focus on developing technologies to enhance the learning activities and communication skills of children with special needs. The theme also allows participants to be immersed in all aspects of engineering, from theory and academic learning to field trips and activities where real-life examples of engineering are studied.

Following a site visit to a local school for children with special needs, participants return to the classroom where they learn how to apply the engineering design process to adapt toys and tools for use by these children. The personal connections formed through the site visit encourage students to envision innovative toys and tools designed to address the specific requirements of the children.



At EDGE, we strive to introduce the various career opportunities in engineering disciplines, as well as to a college experience and Union College. Below are words from a thank you note received on the last day of our program from a former EDGE participant:

*"Walking away from it (EDGE), I feel like I've gained a good idea of what engineering can be like, and why having women in the workforce is so important. I hope EDGE continues on for many years because this has been one of the most exciting and enriching experiences I've ever had. More girls need this opportunity! Thank you again for putting this together; it's changed my life!"*

## MINI COURSES

The EDGE Program is divided into three mini-courses:

1. Introduction to Engineering Design
2. Embedded Systems Design
3. Communications

At the completion of the program, participants will have completed the following tasks:

- Use engineering design principles to develop useful toys or tools for children with special needs.
- Use a computer to develop robotic techniques for communication.
- Enhance technical writing and oral presentation skills.

## FIELD TRIPS

Several off-campus educational trips enable participants to see engineering design at work from the drawing board to the production floor. EDGE students will be able to tour some of the many innovative engineering facilities that New York's Capital Region has to offer.

## DATES/TIME

- Weekdays, July 15-26, 2019
- 9:00 am - 4:00 pm

Participants may be dropped off as early as 8:00 am and picked up as late as 5:00 pm daily. All classes are held at Union College, Schenectady, NY.

## ADMISSION REQUIREMENTS

All EDGE applicants should be in the high school graduating classes of 2020 through 2022 and have completed year-long high school math and science courses.

The EDGE Program offers a *rolling admission policy*. All applications will be considered in the order that they are received and we will send acceptance responses within 30 days. It is highly recommended that all application materials are received by May 1, 2019.

The application materials (available on our website) include:

- The EDGE application form
- Essay

## TUITION

The tuition for the 2-week day program is \$700 which includes instruction, lunch, field trip expenses, supplies and materials.

## CONTACT

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# EDGE

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