Want to use technology 
and science to help people? 
You can at EDGE!

DID YOU KNOW??
While women constitute 51% of the 
American population and 47% of our 
labor force, only 11% of today’s 
practicing engineers are women.

The EDGE program offers high 
school girls a unique opportunity to 
explore engineering in a way beyond 
basic math and science. At EDGE, 
participants are faced with a 
problem of developing tools for real 
life disabled children at a local 
school and use the engineering design 
and problem solving skills developed 
during the program to design and 
create actual toys and 
communication tools for the children.

EDGE participants programming a “talk box”, a 
device designed to assist a child who cannot 
verbally communicate on his or her own

“[EDGE] was one of the best things she has ever done...she came away with so much more than an engineering experience and thank you just does not seem like enough.” - EDGE Parent.

EDGE
EDUCATING GIRLS 
FOR ENGINEERING

Toys and Tools for Disabled Children

SUMMER WORKSHOP FOR 
HIGH SCHOOL GIRLS
JULY 13—25, 2014

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Union College
Schenectady, New York
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**Workshop Description**

A select group of high school girls from around the country will take part in a 2-week residential engineering workshop taught by Union College faculty and high school teachers. The workshop theme, *Toys and Tools for Disabled Children*, focuses on developing technologies to enhance the learning activities and communication skills of children with special needs.

During a visit to a local school program for children with disabilities, EDGE participants will be able to identify the needs of specific children. In the classroom they will apply the engineering design process to adapt toys and tools for use by these children.

EDGE Program also emphasizes the importance of communication skills in engineering. Participants practice and develop presentation skills and writing techniques that are essential in the fields of engineering and science.

**All EDGE participants will...**

- Use engineering design principles to develop useful toys for children with special needs.
- Be introduced to all fields of engineering, with an emphasis on bio-engineering.
- Use a computer to develop robotic techniques for communication.
- Develop technical writing and presentation skills.
- Meet practicing female engineers from all disciplines through dinner and lunch discussions.

**Outside of the classroom**

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.

**Admission Requirements**

All EDGE applicants should be in the high school graduating classes of 2015 or 2016 and have completed year-long high school math and science courses. Students in the graduation class of 2017 will be considered if math and science courses have been completed.

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, 2014.

The application materials includes:

- The EDGE application form
- Essay
- Academic Transcript
- Two Letters of Recommendation

**Tuition**

The tuition for the 2-week residential program is $1,800, which includes room, meals, field trip expenses, supplies and materials. Scholarships are available. For more information please see:

http://engineering.union.edu/edge