



THE ENGINEERING SOCIETY OF DETROIT®

FOUNDED IN 1895

ENGINEERING THE NEXT GENERATION



STUDENT CHAPTERS

ESD Opens Doors.

ESD Student Chapters support university students through engineering school and help them start their careers. From providing care packages to the engineering house at Lake Superior State University to taking Wayne State University students on technical tours at local companies to awarding outstanding leadership scholarships, we invest in tomorrow's future engineers.

“Our first chapter event was at the Auto Show, which ESD paid for us to attend. There, I was able to make connections at American Axle and Manufacturing. With introductions from ESD, I was able to secure several interviews, one of which provided me with the opportunity to do some winter testing on vehicles, and I eventually ended up in a full time position at the company.”

Being an ESD member opens up doors to gain exposure to engineers, managers, and executives starting when you are a student.”

KEITH LEMLEY

Founding Co-Chair of the ESD Student Chapter at Michigan Technological University



ESD SUPPORTS
STUDENT CHAPTERS AT
14 MICHIGAN
UNIVERSITIES

65% of Future City participants say they can see themselves as an engineer someday.

FUTURE CITY

“Future City provides STEM opportunities that students may not encounter during a regular school day. At the competition, my students were surrounded by like-minded kids from all over the area who wanted to learn about engineering and talk about building. They were also surrounded by engineers who further inspired them to become engineers.

One member of our team was a student who would not typically volunteer to speak or perform in front of people. Not only did this student present about our team’s ideas at the Future City Competition, but she did an outstanding job. It was a proud teacher moment.

My students are still talking about the experience eight months later.”

CARRIE MORRIS

Teacher, Defer Elementary School and Pierce Middle School, Grosse Pointe Park



Carrie Morris and her group at Future City



The Pierce Middle School team presenting ideas

ESD’s Future City program brings together 800+ students with 250+ engineering professionals who serve as judges and mentors to move the needle in STEM education.



ESD programs have a profound impact on the lives and futures of girls.

“My daughter embraced the experiential structure of the program and took great pride in the weekly mentorship opportunities with area engineering firms.

Through the early exposure to advanced mathematics, engineering and technology, computer science and communications, my daughter was able to gain a newfound confidence in her abilities in terms of critical thinking, conceiving new approaches to solving problems, and embracing creativity and collaboration through her work.

In fact, the Girls in Engineering Academy left such an impact that in the fall my daughter was placed in AP Math for the school year. I can't say enough about how the GEA program has positively impacted her and is changing the trajectory for girls pursuing STEM opportunities of tomorrow.”

ZAKIYAH BROOKS

Girls in Engineering Academy Parent

GIRLS IN ENGINEERING ACADEMY

ESD's Girls in Engineering Academy is a three-year program that begins in 6th grade and takes girls through 140 hours of summer instruction in engineering, mathematics and language arts, followed by weekend enrichment courses throughout the school year.



Jenesis Brooks, shown here presenting at the Girls in Engineering Academy summer program, attends Beverly Elementary School in Beverly Hills, Mich., where she is the only African American student in Advanced Math, thanks to her participation in the Academy. 95% of the girls in the program live in Detroit, while 5%—like Jenesis—live in Oakland County.

Zakiyah's daughter, Jenesis



Families pay \$125 per student yearly to participate. Actual cost is \$5,000+ per year.

“I have participated in the Girls in Engineering Academy program for two years. My experience has been wonderful.

The Girls in Engineering program has taught me trigonometry, the anatomy and dissection of a frog, drone technology, how to write an excellent research paper and about campus life.

Before the program, I wanted to become a kindergarten teacher. I’m not saying being a teacher is a bad thing but, me becoming an engineer will be much more rewarding.

The Academy is an amazing program that has given me the opportunity to reach high and achieve BIG!”

NEVAEH EVANS

7th Grader at Bates Academy in Detroit and Second-Year Girls in Engineering Academy Participant

ESD changes lives.



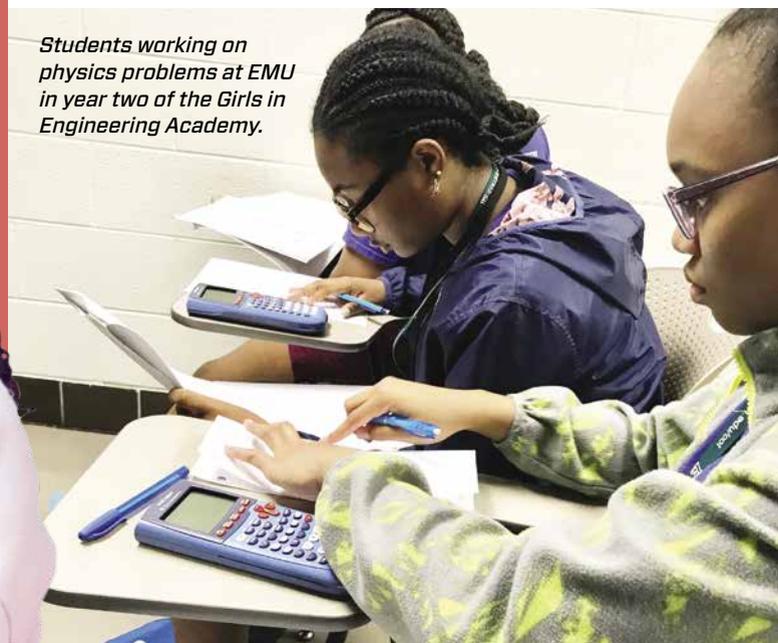
GIRLS IN ENGINEERING ACADEMY

In year one of ESD’s Girls in Engineering Academy, participants spend four weeks in the summer attending classes at Wayne State University with a field trip to a company—like Magna, DTE Energy and Bosch—every Friday.

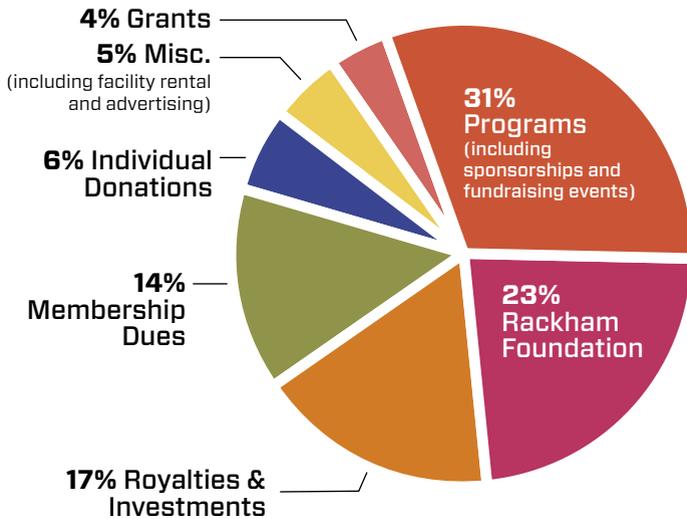
In year two, the girls experience more of campus life in a four-week residential program at Eastern Michigan University. They go to classes, sleep in the dorms, eat in the cafeteria, have and use a student ID—just like they will one day in college. Their days consist mostly of project-based coursework, their evenings are filled with enrichment activities, and their Fridays are spent seeing engineering in action at companies.

Year three begins in July 2019 and is being developed. It will continue our current trajectory and will launch the girls into high school.

Students working on physics problems at EMU in year two of the Girls in Engineering Academy.

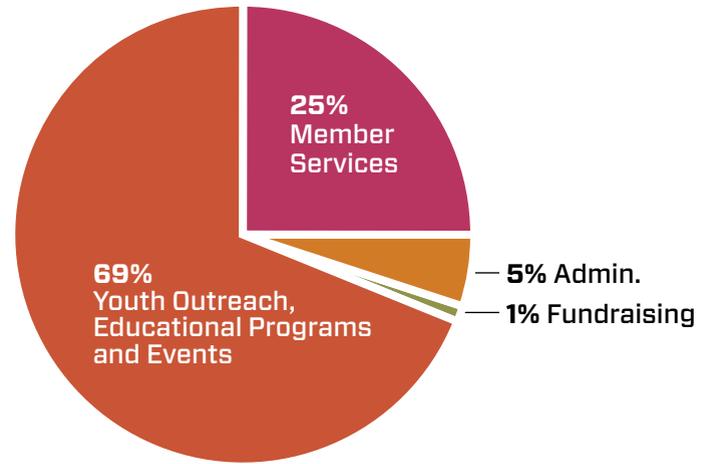


WHERE DO OUR RESOURCES COME FROM? ...



FY17-18 **REVENUE**

... AND WHERE DO THEY GO?



EXPENSES FY17-18

ABOUT THE RACKHAM ENGINEERING FOUNDATION

In 1934, reeling from the Great Depression, the Detroit Engineering Society—shortly thereafter renamed The Engineering Society of Detroit—was near insolvency and needed help. Mary A. Rackham and trustees from the Horace H. and Mary A. Rackham Fund came to the rescue. (Horace H. Rackham was an original investor in Ford Motor Co. and had died the previous year, when the Fund was created.)

In 1936, the Rackham Engineering Foundation was created to administer the Rackham donations to ESD. The Foundation has used the Rackham gifts to ensure that ESD has had a home and the resources to grow and thrive.

ABOUT THE SALE OF THE HORACE H. RACKHAM MEMORIAL BUILDING

In 1940, fulfilling its mission to provide stability for ESD, the Rackham Engineering Foundation collaborated with the University of Michigan to build the Horace H. Rackham Memorial Building, where ESD was headquartered for many years. In the 1990s, ESD moved its headquarters to Southfield, and the Rackham Building was leased.

In 2018, the Rackham Engineering Foundation sold its half of the Rackham building to U-M. The proceeds of the sale returned to the corpus of the Foundation's fund, which the Foundation keeps and grows. A portion of the interest from the fund is given yearly to ESD and forms roughly 23% of the society's revenue.

**YOUR
DONATION
IMPACTS
MICHIGAN
STUDENTS.**

**DONATE
TODAY.**



THE ENGINEERING SOCIETY OF DETROIT
20700 CIVIC CENTER DRIVE, SUITE 450
SOUTHFIELD, MI 48076

248-353-0735
esd.org