

Society of Women Engineers (SWE) Activities to Help Align Industry and Academia



ENGINEERING NEEDS WOMEN

CONFERENCE FOR HIGH SCHOOL GIRLS ON OPPORTUNITIES FOR WOMEN IN ENGINEERING

Mellon Institute Auditorium
Bellefield Ave. Entrance, Oakland, Pgh.

PARENTS AND COUNSELORS INVITED

APRIL 25, 1952 8:00 PM.

SPONSORED BY THE SOCIETY OF WOMEN ENGINEERS

The Society of Women Engineers Presents:

Invent it. Build it.

AN ENGINEERING EXPERIENCE FOR MIDDLE AND HIGH SCHOOL GIRLS, PARENTS AND EDUCATORS

SATURDAY	11.09.19	ANAHEIM CONVENTION CENTER
EXPO 9 AM - 12 PM Attendees should arrive promptly at 9 AM. Everyone starts the day exploring the EXPO and will split up into their own program at 12 PM. Get information about engineering clubs, camps, after-school programs, competitions, best practices, outreach grants and more. There will be lots of fun hands-on activities! <i>Financial and transportation assistance available upon request at inventitbuildit@swe.org</i>		
MIDDLE SCHOOL GIRLS PROGRAM: \$7* 12 PM - 4 PM GIRLS IN GRADES 6-8 Work with women engineers on hands-on engineering activities. Express your creativity and learn how engineers make the world a better place.		
HIGH SCHOOL GIRLS PROGRAM: \$7* 12 PM - 4 PM GIRLS IN GRADES 9-12 Connect with engineers from all over the world to learn about what they do and how to be successful, receive tips on selecting the right college, and take on an engineering challenge!		
PARENT EDUCATION PROGRAM (PEP): \$5* 12 PM - 4 PM PARENTS & EDUCATORS Learn about engineering careers, scholarships, college admission and other helpful resources to support your students.		

*Registration is required. Lunch and t-shirt provided. Attendees will be responsible for parking fees.

Get More Information
 Visit inventitbuildit.swe.org or email inventitbuildit@swe.org

MAKE A WORLD OF DIFFERENCE
 #BETHATENGINEER
 Get ready to learn what engineers do, the positive impact they have on people everywhere and how they make a world of difference.

SWE is a Community



Building SWE Identity aligns academia and industry





SWENext DesignLab Community Engagement Challenge





Challenge

High School *team* to design a *service project* that addresses a specific environmental or economic community need using a hands-on engineering *activity*. The *activity* and *service project* must engage local elementary and/or middle school *participants* using a proposed \$1,000 budget.

Key Objectives



- ★ Design a *Service Project* that addresses a specific economic or environmental community need using engineering.
- ★ Outline a proposal to engage elementary and/or middle school students in a way that will introduce them to engineering through a hands-on *Activity* followed by a *Service Project* to test the *Participant's* designs.
- ★ **Demonstrate plans to engage SWE professional and/or collegiate members in *Activity* and/or *Service Project*.**
- ★ In addition, the *Team* should,
 - Introduce the *Participants* to women in engineering.
 - Familiarize the *Participants* with SWE and SWENext.
 - Show why it is important for women to be in the field by clearly demonstrating key facts to *Participants* (e.g. only 13% of engineers are women).
 - Be mindful of bias literacy research and if possible, include some aspect of this training in the *Activity*.

Resources



- ★ SWE will connect each *Team* with a *SWE Advisor*, unless *Team* requests to work with established *SWE Advisor*. This member will serve in an advisory role to help the *Team* think creatively and implement an *Activity* that provides accurate engineering insights.
- ★ Top 3 teams at each DesignLab will be awarded \$1000 to implement their proposal
- ★ Nine top teams will be entered into Design Challenge Round Up and one team will be selected by SWE members for an all expenses paid trip to our annual conference in Anaheim.



Benefits of Participation



- ★ Community Engagement Opportunity
- ★ Engagement with Women in Engineering
- ★ Invitation to DesignLab
- ★ Grant Proposal Writing Experience
- ★ Project Implementation Experience
- ★ Leadership Experience
- ★ Exposure to Bias Literacy Training
- ★ Role Model Training
- ★ Professional Presentation Experience



Thank You!

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