

NATION'S FIRST
WOMEN
IN ENGINEERING PROGRAM



DREAM IT. DESIGN IT.
BUILD IT. CREATE IT.
THAT'S WHAT
PURDUE
ENGINEERING
IS ALL ABOUT.



**MAKE
YOUR MARK**



design life.*engineer.*

WE
CONNECT
SUMMER 20 **17**



MISSION AND OBJECTIVES

Since 1969, Purdue's Women in Engineering Program has been committed to increasing the recruitment, retention, and graduation of women engineering students. Each year, we reach out to support and inform more than 4,000 girls and young women - from elementary school through graduate school.

MISSION:

The Women in Engineering Program at Purdue University is dedicated to enriching the profession of engineering through the full participation of women. We develop and direct activities that provide:

- encouragement for girls and young women to study engineering.
- information about careers and companies.
- an environment conducive to the successful completion of students' studies.

We also strive to maintain strong relationships with alumnae, friends and employers who generously support our program.

OBJECTIVES:

- To provide career information and encouragement to pre-college girls and young women to continue achievement in math and science and consider engineering as an appropriate career choice.
- Encourage women to matriculate at Purdue University in the College of Engineering.
- Ensure a climate in the College of Engineering that allows young women to reach their full potential.
- Provide opportunities for women engineering students to develop leadership skills that can be utilized in their future lives.
- Encourage women to consider graduate education and academia among their options upon graduation.
- Maintain open communication with alumnae and their employers to encourage their continued participation in and support of the Women in Engineering Program.



The Women in Engineering Program could not achieve its mission to enrich the profession of engineering through the full participation of women without the generous support of our donors. We are taking part in ***Ever True: The Campaign for Purdue University*** capital campaign. The campaign is an exciting endeavor with transformative potential and is made possible both by the generosity of our alumni and friends and by the commitment of our faculty, staff, and students. If you would like to make a contribution, please go to giving.purdue.edu or contact Hilary Butler at 765.494.6383 or habutler@prf.org.

CHANGE THE CONVERSATION



›MOTHER/DAUGHTER EVENTS

How we talk about engineering and STEM in our homes matters. That is the message we strive to give our participants at the various Mother/Daughter events that WIEP has presented. While the daughters, age 4th through 6th grade, immerse themselves in an engineering challenge led by current female engineering students as role models; the mothers, and mother figures, immerse themselves in a discussion focusing on the conversations they are having with their daughters regarding STEM.

We look at research and statistics surrounding STEM and this age group and discuss how these results are evident in our lives. We dive into how to make the conversations we are having with young people reveal the impact engineering and STEM careers have on our world. At the conclusion of our discussions, we hope each adult participant walks away either affirmed that they are already cultivating an encouraging stem mindset, or with concrete examples of how to change their conversations.

If you are interested in learning how you could help facilitate one of these events in your area, contact, the program coordinator and WIEP Assistant Director, Sue Bayley.



"The session helped me think differently about how I talk to my daughter about engineering and to be better able to encourage my daughter and other girls to become engineers."
- Parent



PROGRAM FEATURE - WieCoNEXTions



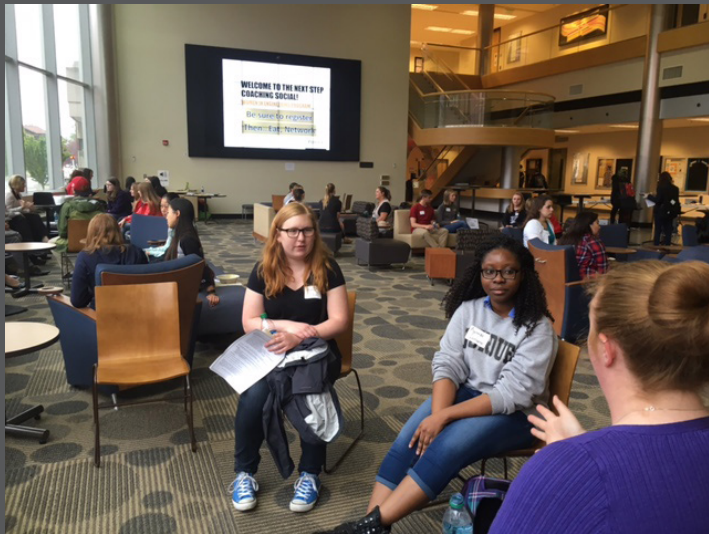
...the next step in your career

- Looking for ways to share your experience with students?
- Have a desire to help out a fellow Boiler?
- Be a mentor for a current student?
- Or do you need a mentor to move your career to the next level?
- Want to connect with your college classmates?
- Does your company hold events that you'd like to invite students to?

THEN JOIN WieCoNEXTions!!

Creating a profile is easy!
Go to <http://tinyurl.com/WiECoNEXTions>

Since the Purdue Engineering community is spread world-wide, WIEP wanted to provide an online platform to encourage engagement and networking. WieCoNEXTions is the perfect tool. This platform takes the next step beyond sites such as MentorNet or LinkedIn. WieCoNEXTions members — current students, Purdue Engineering Alumni, and our industry partners — are able to share resources, form groups, network, developing mentoring relationships, or just re-connect with fellow Boilers. WieCoNEXTions was developed for the Purdue Engineering community to take the **next step in their careers**.



All Members Are Able to:

- Choose to be a **mentor**, **mentee**, neither, or both
- Find and share **resources** pertinent to career success
- **Network** with other members — students, alumni, industry partners
- Share **events** pertinent to career success
- Join or create **groups** to facilitate networking and resource sharing
- Browse or share **job openings**

Coming Soon!!

- Learn skills and demonstrate competency in mentoring and coaching through the Purdue Passport Badge system
- Become an outreach partner by accessing our repository of K12 activities
- Check the app store for the WieCoNEXTions app!



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“Women need to know that if they aren’t yet comfortable with their path, that discomfort is their motivation to look further. The goal isn’t to suppress the discomfort, but instead to explore it, to look for what will truly be satisfying.”
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-Sue Abreu, B.S. Interdisciplinary Engineering, Purdue University
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ALUMNA FEATURE



Sue Abren, MD, JD

Education

B.S. Interdisciplinary Engineering, Purdue University

Current Position

Administrative Judge (technical) for the Atomic Safety & Licensing Panel at the U.S. Regulatory Commission

I am an engineer at heart. I don't know when I became aware of that, but I'm certain of it now. When I started in first-year engineering, I didn't know I was an engineer at heart. I thought I would be a math teacher, and that by studying engineering, I would learn how math is applied so that I could explain to my students why math is important. I also had no idea what type of engineering I wanted to study. I looked at different areas of engineering as I tried to find where I fit. But I also wanted to explore areas outside of engineering. This wasn't the norm for first-year engineering students, but I had support from the Purdue Women in Engineering Staff (WIEP), as well as from my academic advisor. Thankfully, they tolerated my wayward class choices and encouraged me to look for what interested me. Who could imagine taking a 300-level athletic training course would be the right choice for a second semester engineering student?

It was that one class that led to my interest in combining engineering with sports medicine. While working as a student trainer, I saw that doctors didn't listen to you if you weren't a doctor. So, late in college I decided I needed to go to medical school. But engineering was still very important to me, so I finished my B.S. through Interdisciplinary Engineering. In medical school, I found that the pre-meds were better at memorizing volumes of facts, but I was better at using the facts. The solid, problem-solving foundation I received in engineering was especially crucial when I got to the clinical years of medical school and beyond. Thinking like an engineer gave me the edge when it was time to sort through a patient's issues, determine what other information was needed to find the cause of their maladies, and find the best course of care for them.

Fresh out of Purdue, I was asked to return and speak to the Women in Engineering Seminar. At the time, I was just starting medical school and had no idea where I would go from there. As it turned out, I ended up specializing in Nuclear Medicine, a field I hadn't even heard of while I was in college. But the support Purdue had given me during my undergraduate exploring gave me the confidence to continue looking for what for what interested me the most and not to settle for work that was just "OK." The WIEP has kindly continued to invite me to speak at ENGR 194 while it has grown to two sections with more women per section. The current theme of my presentation is "things you can do with your engineering degree besides be an engineer." By sharing my unusual career path, I hope that some of that students who don't fit in the traditional career pathways will realize that it's ok to be different. Having non-traditional interests doesn't mean that they don't fit in engineering; it just means that they need to explore further how their interest and engineering can be blended.

If a student can find what captivates her, she can then look for how engineering can be integrated with her interests. For example, if she loves music, perhaps she'll design better acoustics for theaters, or new speaker systems, or new musical instruments. Women need to know that if they aren't yet comfortable with their path, that discomfort is their motivation to look further. The goal isn't to suppress the discomfort, but instead to explore it, to look for what will truly be satisfying.

I have found enjoyment from many different jobs, but I also have had times when I realized that I was becoming restless. That was time to start exploring again. Engineering took me from medicine, to consulting, to law school, and into my current job, my dream job, as an Administrative Judge (technical) for the Atomic Safety and Licensing Board Panel at the U.S. Nuclear Regulatory Commission. Although my knowledge of nuclear medicine is important, my engineering foundation is what give me the skills I need to deal with highly technical issues involving with licensing of nuclear power and nuclear materials.

I'm very fortunate to have been helped by, and to be part of, WIEP. With its support, I found that my heart lies in engineering, even as it launched me into other areas. I hope that by sharing my journey, today's women will see that engineering can help them turn their dreams into reality.

VALUED VOLUNTEERS

ALUMNI AND CORPORATE PARTNERS

PROGRAM	NAME	DEGREES	COMPANIES
AA	Emily Anderson	BS CE; MS CE	Christopher B. Burke Engineering Ltd.
JEEP	Jennifer Beckwith Wright	BS CE	Milwaukee Metropolitan Sewerage District
AA	Mary Beeson	BS CHE	General Mills
AA	Madison Bennett		3M
AA	Brittany Benton	BS ME	General Electric Appliances
JEEP	Melanie Brickley	BS IE	FM Global
AA	Mike Chezem	MET	GE Appliances (A Haier Company)
AA	Candice Corso	BS CHE	3M
GMP	Laura Dietsche		Dow Chemical
GMP	Martha Feeback		Catalyst, Inc.
JEEP	Erika Fotsch	BS ME	Allison Transmission
JEEP	Carole Gilligan	BS ME	Honda North American, Inc.
JEEP	Jill Gough		Caterpillar, Inc.
AA	Jenny Grove	BS CHE	General Mills
AA	Anya Heinimann	BS CHE	Kimberly Clark
GMP; AA	Melinda Hendrix	BS ME	Naval Surface Warfare Center, Crane Division
JEEP	Julie Hildebran	BS ME	Precision Castparts Corporation
JEEP	Colleen Hittle	BS IE	Navigant
JEEP	Sara Hoffman	BS CE	GE Transportation
AA	Ashlee Janczak	BS BME	Norwood Medical
JEEP	Rachel Janney	BS ME	General Motors
JEEP	Amanda Jordan	BS CHE	Cargill Dry Corn Ingredients
WC	Keri Kukrai	BS IDE	EV3
AA	Lila Leibat	BS EE	Coursera
JEEP	Brittany Leigh	BS ME	Dickinson-Wright PLLC
AA	Emily Liggett	BS CHE	NovaTorque; UCT
JEEP	Savannah Marstall	BS NE	Enercon
AA	Kaitlyn Mast	BS BME	Kimberly Clark
JEEP	Meghan McKendry	BS IE	XPO Logistics- Supply Chain
JEEP	Anne McLaren	BS IE; BS Math; MS IE; PhD IE	Cummins Inc.
JEEP	Jenni Morsches	BS CE	Kimley-Horn
AA	Erin Murphy	BS ME	3M Corporation
JEEP	Jessica Pilotte	BS CE	TranSystems
AA	Patti Poppe	BS IE; MS IE	Consumers Energy Company
JEEP	Susan Quasney	BS CE	Village of Downers Grove, Illinois
JEEP	Sarah Reiff	BS ME	The Fire Protection International Consortium, Inc.
GMP; WC	Roberta Ressler	BS CHE	Dow AgroSciences
AA	Jay Sampson	BS AG	General Mills
JEEP	Devon Stangland	BS CHE	The Dow Chemical Company
Mentoring	Ellen Tobias	BS CHE	
JEEP	Bea Toda	BS CE; MS CE	UL LLC
AA	John Todd	BS ME	GE Appliances
GMP; AA	Glenn Weckerlin	BS CHE	Chevron Corporation
JEEP	Jacqueline Wohlford	BS IE	Essex Group, Inc (via contracting firm Experis US)

Abbreviations and Acronyms Dictionary

WIEP Programs

AA- Access Alum
ENGR 494- Women in Engineering Senior Seminar: Gender in the Workplace
GMP - Graduate Mentoring Program
I2R- Innovation to Reality
IGED- Introduce a Girl to Engineering Day
JEEP- Juniors Exploring Engineering at Purdue
M&M- Mentors and Mentees
WC- WiECoNEXTions

Degree

BS- Bachelor of Science
MA- Master of Arts
MS- Master of Science
MSE- Master of Science in Engineering
PhD- Doctorate Degree

Program

ABE- Agricultural and Biological Engineering
BME- Biomedical Engineering
CE- Civil Engineering
CHE- Chemical Engineering
ECE- Electrical and Computer Engineering
ED- Education
EE- Electrical Engineering
EET- Electrical Engineering Technology
ENE- Engineering Education
ET- Engineering Technology
IE- Industrial Engineering
ME- Mechanical Engineering
MET- Mechanical Engineering Technology
MSE- Materials Science Engineering
ORG COMM- Organizational Communication
SCI- Science



PURDUE FACULTY, STAFF AND STUDENTS

PROGRAM	NAME	SCHOOL/DEPARTMENT
GMP	Michelle Whipple	Recreation and Wellness
GMP	David Bowker	Office of Future Engineers
JEEP	Anne Dransfield DeLion	Instructional Support
M&M	Jennifer DeBoer	Engineering Education
JEEP	Caitlin Anne Surakitbanharn	Industrial Engineering
M&M	Suzanne Zurn-Burkheimer	Women in Engineering Program

Thank you to all of our valued volunteers. The success of our programming from January - June 2017 wouldn't have been possible without the outstanding support from the listed alumni, faculty, staff, students, and friends who graciously volunteered their assistance to WIEP.

OPPORTUNITIES FOR ALUMNAE ENGAGEMENT

There are many ways for you to get involved with WIEP. Listed below are some volunteer opportunities. If you have an interest, please complete this online form. The form will provide us with information for our database.

These opportunities are open to everyone and unlimited in number. Let us know you are interested, and we will get you set up.

- **Access Alum** – *informal chats with current students while on campus visiting, recruiting, etc.* Needed: alumni to inform us when they'll be on campus and available for an event.
- **WE Link** – *connecting with high school seniors as they apply and ultimately decide whether Purdue engineering is the place for them.* Needed: guest bloggers sharing experiences that encourage and inspire. Visit The Engineering Experience Blog.
- **WIECoNEXTions** – Needed: engineering graduates in industry, academia, government, non-profit, medicine, law, and business to act as an online mentor or coach to students. ***This one-on-one connection is facilitated through our NEW WIECoNEXTIONS online platform.***

These programs are looking for recent alumnae (within the last 10 years). If you meet that criteria, let us know you are interested, and we will invite you!

- **Exploring Engineering at Purdue days** – *one day on-campus recruiting programs for high school juniors and seniors.* Needed: panels of engineering professionals less than 10 years from graduation to talk about what they do in the “real world”

These programs need inspirational and engaging speakers whose talks are interactive with a message aligned to course/program objectives. There are a limited number of openings. If you let us know you are interested, we will be in touch if we find a good fit.

- **ENGR 194** – *Women in Engineering Seminar for first year students.* Needed: motivational alumnae who share college experiences and relate those to where they are now and what they do in their positions.
- **ENGR 494** – *Women in Engineering Seminar: Gender in the Workplace.* Needed: motivational speakers to share experiences and solutions for internal and external barriers which can prevent women from reaching their greatest potential in the workforce
- **Mentors & Mentees (M&M)/Graduate Women in Engineering Network (GWEN)** – *Undergraduate and Graduate student mentoring programs.* Needed: facilitators of interactive/workshop style topics including but not limited to: life skills, engineering roles, non-traditional paths, life/work balance, finances, Entrepreneurship, global etiquette.

If you are interested in doing outreach programming near where you live, let's talk to see if becoming an Engineering Outreach Partner is right for you!

- **Engineering Outreach Partner (EOP) Initiative** – *sharing our outreach model, best practices, training, and other resources nationally.* Needed: alumnae partners who can help share WIEP's vision and passion for advancing youth education by leading precollege students in hands on engineering activities and/or interactive discussions.



Women in Engineering Program

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www.purdue.edu/wiep

www.purdue.edu/designlife