PURDUE UNIVERSITY

WOMEN

IN ENGINEERING PROGRAM

design life.*engineer.*

NATION'S FIRST **WOMEN** IN ENGINEERING PROGRAM

MAKE YOUR MARK

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


PURDUE UNIVERSIT


The Purdue Student Section
SOCIETY OF

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 offer our sincerest thanks to all who continue to support our programs. To make a contribution, please visit *giving.purdue.edu* or contact Hilary Butler at 765.494.6383 or *habutler@prf.org*.

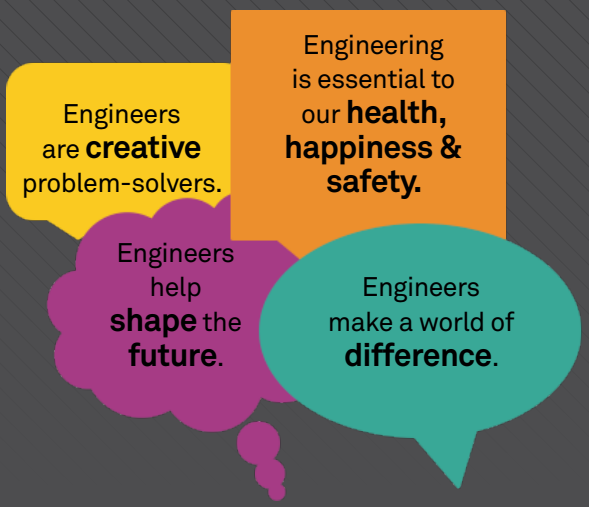
CHANGE THE CONVERSATION

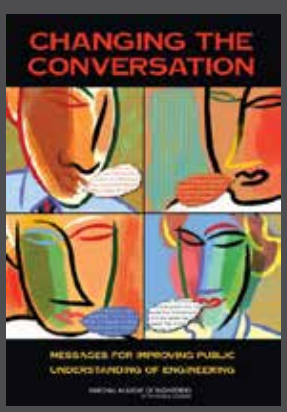
› HOW ARE YOU CHANGING THE CONVERSATION ABOUT ENGINEERING?

WIEP strongly supports recent efforts by the engineering community to communicate more effectively about the profession and those who practice it. Results of research-based efforts led to the developing and testing of new, more effective messages about engineering. These new messages cast engineering as inherently creative and concerned with human welfare, as well as an emotionally satisfying calling. If you are in a position to influence young people, we encourage you to learn the best way to share what engineers are and what they do in a way that excites and inspires young people to go into engineering-related careers. Below are a couple of online resources to help you do just that!

Read the 2008 NAE publication, Changing the Conversation: Messages for Improving Public Understanding of Engineering

Visit the National Academy of Engineering website on Messaging for Engineering: From Research to Action.





Train of Thought, pictured above, was brought to life in Purdue's own Artisan and Fabrication Laboratory by undergraduate students Lauren Myers-Bright (Multidisciplinary Engineering-Textile) and Joseph Morgan (Aeronautical and Astronautical Engineering). It is currently on display in the Office of Future Engineer's Welcome Center in the Neil Armstrong Hall of Engineering.

PROGRAM FEATURE - ENGR 494




› ENGR 494 - WOMEN IN ENGINEERING SEMINAR: GENDER IN THE WORKPLACE

For the first time, WIEP piloted a one-credit course aimed at providing junior and senior engineering students an opportunity to maximize their earning potential, promotion opportunities, and retention within engineering and related fields. The class welcomed guest facilitators who shared stories and tips about their time in various engineering-related careers. The students also learned and practiced peer-coaching skills. As a result of course participation, enrolled students:

- ↗ became more aware of and internal and external barriers which can prevent women from reaching their greatest potential in the workforce, as well as solutions to these challenges
- ↗ enhanced their professional development and transition skills required to move successfully from an academic to professional environment
- ↗ acquired skills and knowledge to serve as engineering role models for diverse populations.

"I have greatly enjoyed this thought-provoking seminar, not only as an opportunity to learn new things and how to advance my career, but also as a way to better myself, my opinions, and how I view the impact that I could have in the world. Even when talking about school, this is the class that keeps coming to mind, and the one I love telling people about. Even my mom noticed that my passion for engineering had been re-invigorated.I love designing my own project and learning for the sake of learning. On our research project for our final project I greatly enjoyed networking, and going into a new situation with an open mind. I never thought I would want to go back to school after getting my undergraduate degree, but I can now see the appeal that a research position can have. This project has made me completely rethink my long-term career goals. I also have found the coaching to be incredibly rewarding....I have learned how to be a better listener, how to ask better questions, and how rewarding it can be to be a small part of someone else's success.... The coaching element of this course can help me in the future when attending big meetings and asking potent questions. It can help me in academia when I want to dive deeper in the material and understand connections in order to really understand the concepts. I have highly recommended this class to anyone who has asked about it, and will definitely go into the book as one of my favorite college courses."

- ENG 494 Course Participant

"We need to introduce the concepts of engineering at a very early age. When I started working with WIEP, my idea was to take their brilliant ideas 'on the road.' The WIEP staff can't be everywhere, so the extended family of other Purdue female engineering alums is a great way for us to spread the word."

-Cheryl Cunningham, BSCE '80, Purdue University

ALUMNA FEATURE - CHERYL CUNNINGHAM

› Cheryl Cunningham, P.E. – President, PCS Engineers

License: P.E. in Indiana, Kentucky, Arizona, Wisconsin, Texas, Missouri, Ohio, Iowa, Tennessee, and Minnesota

Education: Purdue University, BSCE, 1980

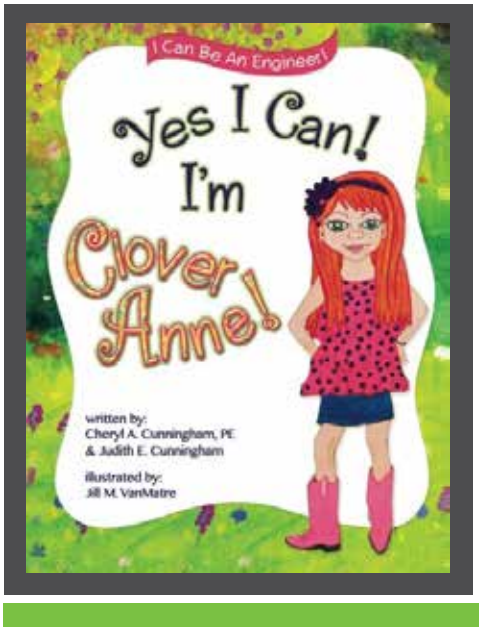
Other: 2009 Purdue University Civil Engineering Alumni Achievement Award Recipient, Purdue Alumni Association Board of Directors, ACEC Board of Directors, Chi Epsilon Chapter Honor Member (Purdue University, 2012)

What is your favorite project that you have worked on in your career?
I started my career in the construction of Nuclear Power Plants. Being part of the construction of these massive power plants was an unforgettable experience.

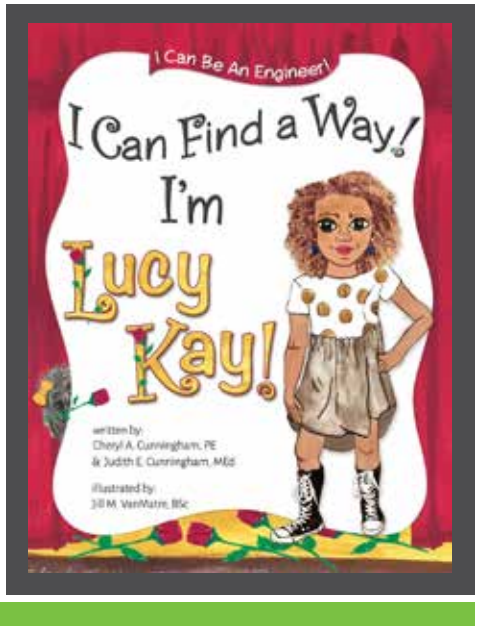
Who has been most influential in your career?
My grandmother got a college degree in Math in the 1920's, which was unusual for woman then. She encouraged me to expand my horizons and not allow social barriers to limit my success.

What character trait do you possess which makes you a great engineer?
Problem solving - there is always a solution to any engineering problem.

About the Women in Engineering Program at Purdue:
The Women in Engineering Program at Purdue is a fantastic Program! I get energized every time I meet with the staff or work on a project. WIEP is always coming up with new ideas on how to encourage young women to think about engineering as a career option. We need to introduce the concepts of engineering at a very early age. When I started working with WIEP, my idea was to take their brilliant ideas "on the road." The WIEP staff can't be everywhere, so the extended family of other Purdue female engineering alums is a great way for us to spread the word. Women engineers standing in front of a group of students talking about engineering is a very effective way for young girls to see that, they too, can become an engineer!



"I'm also very excited to announce that I'm now an author! More important than that, the books I have written, with the help of my sister and niece, introduce the concept of engineering to young children from their perspective. The protagonists of the stories are young girls, which I chose deliberately with the hope that more young women will become interested in the engineering field. You can learn more about Yes I Can, I'm Clover Anne! and I Can Find a Way! I'm Lucy Kay! at Amazon.com. I hope you will share these books with the budding engineers in your life!"



Click here to view Cheryl's full resume.

VALUED VOLUNTEERS

ALUMNI AND CORPORATE PARTNERS

PROGRAM	NAME	DEGREES	COMPANY
IGED	Mary Ellen Blichmann		Caterpillar
M&M; Access Alum	Melissa Brown	BS CHE	CSN
JEEP	Tracy Chariton	BS CE	JPS Consulting Engineers
GMP	Eileen Cochran	BS Accounting	Reed & Company, P.C.
Access Alum	Maya Denton	BS CHE	Air Products
Access Alum	Jenell Fairman	BS CE	Core Planning Strategies, LLC
ENGR 494	Jenell Fairman	BSCE	CORE Planning Strategies, LLC
IGED	Jill Gough	BS AG	Caterpillar
ENGR 494	Sara Greer	BSCE	Marathon Petroleum
JEEP	Olivia Hawbaker	BS CE	Citizens Energy Group
JEEP	Sara Hoffman	BSCE	GE Transportation
JEEP	Elisha Huddleston	BS IE	General Motors
Access Alum	Kelsey Hunter	BS EEE	Hull & Associates, Inc.
M&M	Marlee Jansen	BS CHE	Lawyer
Access Alum	Brynn Johnson	BS ME	Harris Corporation
JEEP	Amanda Jordan	BS CHE	Cargill
Access Alum	Stephanie Koppes	BS CHE	Air Products
Access Alum	Jamie Lewis		Qualcomm, Inc.
JEEP	Melissa Marcum	BS CHE	Eli Lilly and Company
JEEP	Karissa McConnell	BS IE	Lean Too Consulting
JEEP	Taylor Mowery	BS CHE	Honda Manufacturing of Indiana
JEEP; Access Alum	Dana Newell	BS IE	Whirlpool Corporation
JEEP	Beth Peregrine	BS BME	Zimmer Biomet
IGED	Katie Pierce		Caterpillar
GMP	Jessica Rebmann	BS E	Morgan Stanley Smith Barney
IGED	Ashley Ringer	CERT MGMT & BS EDE	Caterpillar
M&M	Bonnie Romano	BS ME	Design489 Photography
JEEP	Stacey Schafer	BSME	Stericycle, Inc.
ENGR 494	Amy Sell		Marathon Petroleum
M&M; Access Alum	Cece Sharp	BS CHE	Kimberly-Clark Corporation
GMP	Megan Stearns		Purdue Employees Federal Credit Union
JEEP	Emily Storm-Smith	BS NE	Law Student
JEEP	Andrea Taylor	BS ABE	Colorcon, Inc.
Joint Mentoring	Anne Wilson	BS CME & MS CE	Bigane Paving Company
JEEP	Lisa Wink	BS IE	Toyota Motor Manufacturing Indiana
Access Alum	Mary Ann Zimmerman	BS CE & MS CE	US Department of State

PURDUE FACULTY, STAFF AND STUDENTS

PROGRAM	NAME
ENGR 494	Mona Bapat
I2R	Eleni Bardaka
I2R	Alex Bruce
JEEP	Patrick Brunese
ENGR 494	Annie Carr
I2R	Siva Chaitanya
I2R	Chen Chen
JEEP	Jill Churchill
I2R	Viktor Cybulskis
JEEP	Anne Dare
ENGR 494	Nathalie Duval-Couetil
JEEP	Abby Engelberth
ENGR 494	Kendra Erk
I2R	Kacey Faust
JEEP	Brandon Fulk
I2R	Maryam Ghadiri
JEEP	Amy Glenn
ENGR 494	Allison Godwin
I2R	Rajamani Gounder
JEEP	Jeff Gray
I2R	Trey Harrison
ENGR 494	Beth Holloway
JEEP	John Howarter
I2R	Sabrina Huang
JEEP	Chad Jafvert
JEEP	Jason Krupp
JEEP	Corey Linkel
I2R	Jaqueline Linnes
JEEP	Kate Marrero
I2R	Daniel McArthur
JEEP	ME Ambassadors
JEEP	Lori Pence Barber
JEEP	Mary Pilotte
JEEP	Jon See
ENGR 494	Chandni Shah
JEEP	Catherine Sleeth
M&M	Roger Stewart
JEEP	Pervin Taleyarkhan
JEEP	Dan Taylor
ENGR 494	Nicole Towner
I2R	Kit Valone
I2R	Anna Walter
JEEP	Stephen Wanders
JEEP	Taylor Weast
JEEP	Jim Whitford
ENGR 494	Kathy Wierzchowski
JEEP	You-Yeon Won
JEEP	Chongli Yuan

Thank you to all of our valued volunteers. The success of our Spring 2015 semester programming wouldn't have been possible without the outstanding support from the following alumni, faculty, staff, students, and friends who graciously volunteered their assistance to WIEP.

SCHOOL/DEPARTMENT

Counseling and Psychological Services
Lyles School of Civil Engineering
School of Materials Engineering
School of Industrial Engineering
Counseling and Psychological Services
School of Mechanical Engineering
Department of Earth, Atmospheric, & Planetary Sciences
Global Engineering Program
School of Chemical Engineering
Global Engineering Program
Technology Leadership and Innovation
Division of Environmental and Ecological Engineering
School of Materials Engineering
Lyles School of Civil Engineering
Division Construction Engineering Management
Ecological Sciences & Engineering Program
Office of Future Engineers
School of Engineering Education
School of Chemical Engineering
School of Electrical and Computer Engineering
School of Mechanical Engineering
College of Engineering
School of Materials Engineering
School of Materials Engineering
Division of Environmental and Ecological Engineering
School of Nuclear Engineering
Weldon School of Biomedical Engineering
Weldon School of Biomedical Engineering
Weldon School of Biomedical Engineering
Department Biological Sciences
School of Mechanical Engineering
Student Success, College of Engineering Administration
School of Engineering Education
Lyles School of Civil Engineering
Department of Educational Studies
Office of Admissions
Student Activities, Organizations and PMU
Purdue Research Foundation
Department of Agricultural & Biological Engineering
College of Science
School of Materials Engineering
School of Materials Engineering
Office of Professional Practice
School of Aeronautics and Astronautics
School of Engineering Education
Department of Educational Studies
School of Chemical Engineering
Purdue University - School of Chemical Engineering

Engagement Event- Seniors Exploring Engineering at Purdue (SEE Purdue)
L to R: Taylor Mowery, Emily Keen, Ellen Wittenberg, & Jenell Fairman

OPPORTUNITIES FOR ENGAGEMENT WITH WIEP

There are many ways for you to get involved with WIEP, e-mail us at wiep@purdue.edu if you have an interest in assisting with one of these valuable programs. Fall semester opportunities include:

- **Access Alum** – informal chats with current students while on campus visiting, recruiting, etc.
- **Seniors Exploring Engineering (SEE) Purdue** – one-day on-campus program for high school seniors. Needed: panels of young engineers to talk about what they do in the "real world"; faculty & grad students to lead interactive sessions on engineering disciplines; Purdue faculty, students, staff, and alumnae to network, guide and informally speak with high school seniors and their parents.
- **ENGR 194** – Women in Engineering seminar for first year students. Needed: motivational speakers who share college experiences and relate those to where they are now and what they do in their positions.
- **WE Link – c**onnecting 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.
- **Mentors & Mentees (M&M)/Graduate Mentoring Program (GMP)** – 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, and global etiquette. Also needed: Next Step Coaches – graduates now in industry, academia, and government positions to provide more personalized interaction preparing participants for their careers.
- **Innovation to Reality (I2R)** – on-campus after-school program for 6th-8th graders. Needed: faculty and graduate students to be guest speakers, provide lab tours, and hands-on engineering activities.

To look ahead at opportunities during the spring semester visit www.purdue.edu/wiep/EngagementOpportunities

PURDUE UNIVERSITY
WOMEN IN ENGINEERING PROGRAM
WiE CONNECT SUMMER 2015

Designed by: HMC 2015
EA/EOU

design life.*engineer.*

Women in Engineering Program
Neil Armstrong Hall of Engineering, Room 1245
701 W. Stadium Avenue
West Lafayette, IN 47907-2045

wiep@purdue.edu
www.purdue.edu/wiep
www.purdue.edu/designlife

PURDUE
ENGINEERING