



University of Idaho

College of Engineering

Constellation Mentorship and Partnership for Future Women Engineers

ISPE Conference

September 8, 2022

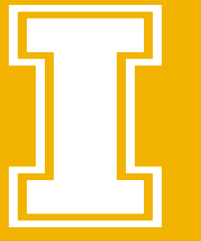
Katie Schiffelbein, Ph.D.

Micron Director of Org Development,
Diversity. and Inclusion

Madelynn Gregoire

Civil Engineer, 2023
U of I SWE Chapter Vice President

WHY MENTORSHIP?



20%

Women Engineer College Undergraduates (APA Convention)

14%

Women Engineers (ASME)

Double Bind

Intersectionality of race, ethnicity, sexual orientation and gender

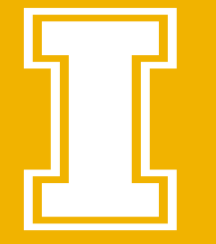
Lack of female role models

Work/family conflict

Chilly industry climate

Lack of personal development opportunities

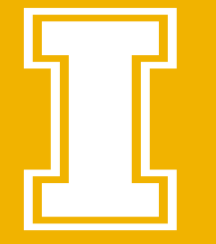
WHY MENTORSHIP... FOR ME?



...These amazing women!

- Personal and professional development
- Inspiring future engineers
- Connecting with others
- Giving back
- Growth opportunities
- Professional Development credit
- Fun!

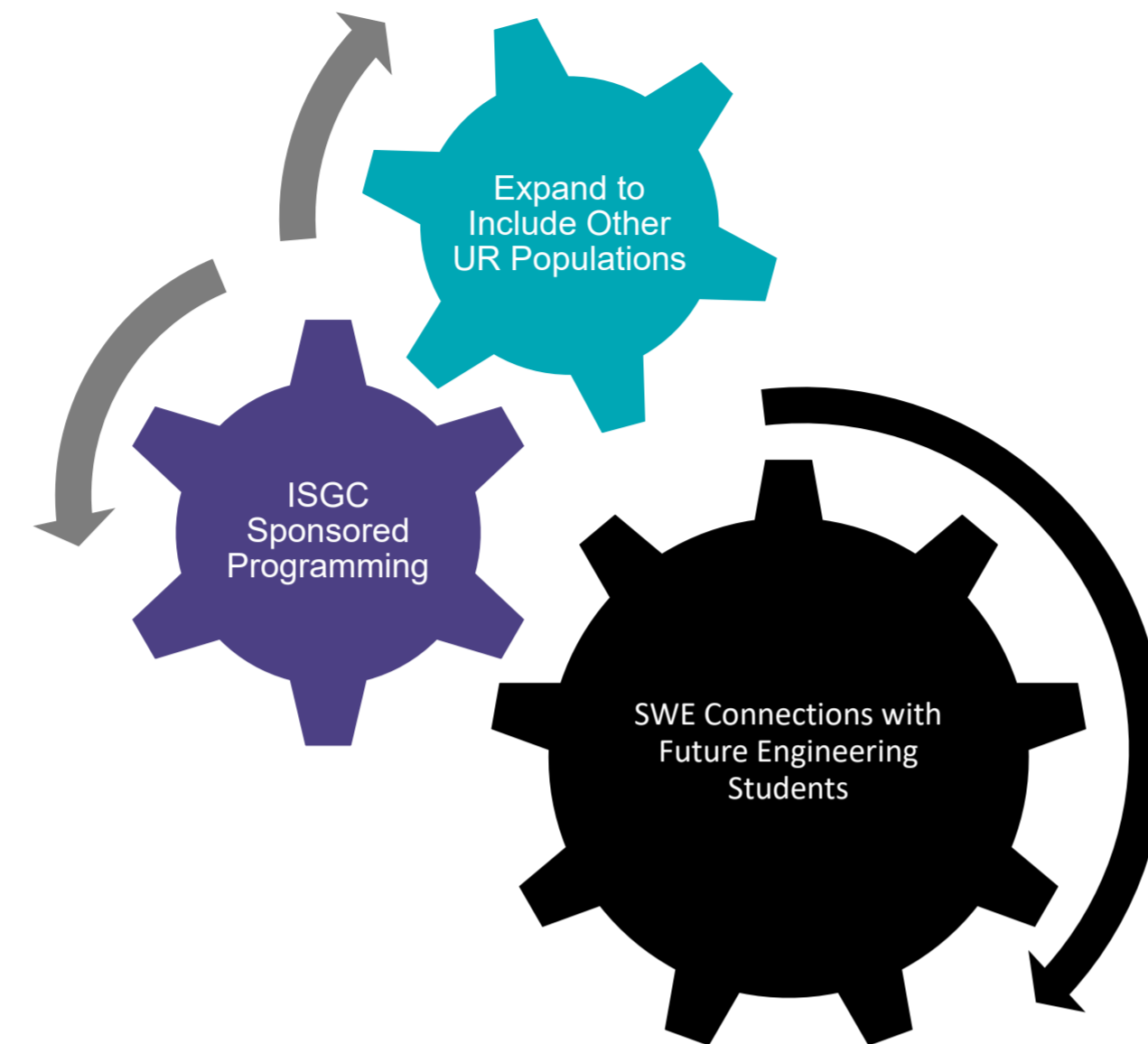




CONSTELLATION MENTORSHIP MODEL

- **Pod Structure**
 - 4-6 undergraduate student mentees
 - 2 professional engineer mentors
- **Multiple avenues for development**
 - Peer to peer
 - Peer to professional
 - Professional to professional
- **Current industry partners**
 - INL
 - Simplot
 - Idaho Power





2023 MENTORSHIP – COHORT THREE

- I** Expand to include traditionally underrepresented population – SHPE, NSBE, OMA Diversity Scholars, Black Cultural Center
- I** Increase number of participants
 - Professional engineer mentors and industry partners from 15 - 25
 - SWE and UR mentees from 32 to 42
- I** Idaho Space Grant Consortium Grant
 - NASA Speaker Series
 - NASA Challenge Review
 - Aerospace-related industry field trip in Northern Idaho




PROGRAM WORKBOOK SUPPORT



College of Engineering
Diversity, Equity and Inclusion

Mentorship Workbook

In partnership with
U of I Society of Women Engineers
and Idaho National Laboratory



Resources

Self-Care Board

Start!	Go for a short walk!
Finish! And celebrate!	
Take 5 Deep Breaths	
More water!	
Draw your favorite animal!	
Give yourself 3 compliments	Free Space!

- Use virtual resources
- Move in open spaces
- Advise on how to have a task or project
- Roll around as you can need enough

College Career Intentional Connections

Purpose: Brainstorm strategies to build intentional connections with faculty, and mentors during your college career.

Ways to connect:

- Socialize: fun activities, hobbies, volunteer groups, student clubs
- Network: make a plan, be your biggest fan, get acquainted with faculty, mentors and advisors, ask for help and ask questions
- Practice healthy conflict resolution: college is perfect for practicing healthy communication and moving through challenge.
- Imposter syndrome: Remember, you're in the learning and development stage! You are enough and you deserve to be here.
- Take care of yourself: Check out the self-care resources in this workbook.

Experience > GPA: Yes, grades are important factors in showing how you've demonstrated understanding of key concepts. Yet, you can be a great engineer without being a perfect, straight-A student. Engineering requires creativity and original thinking, outside of test-taking.

Brainstorm strategies to get experience, gain wisdom and insight from your mentors, and practice curiosity outside your comfort-zone.

My Unique Strengths

**Note: We'll do this activity in March, yet feel free to get a head start!*

Purpose:

1. Understand and be able to talk about natural strengths/talents and how they relate to your values and your engineering career.
2. Actively listen to and understand how your pod's talents relate to their values and engineering context;
3. Walk alongside and call out how your partner's strengths contribute to their engineering.

Familiarize yourself with your team

1. What was your first reaction to your partner's strengths?
2. What did you discover about yourself and your partner's strengths?
3. What surprised you about your partner's strengths?

One strength I commit to

Work-Life Harmony

Purpose: Develop strategies and habits now for integrating work into the rest of your life in a way that promotes well-being at home and in your work.

Dialogue and brainstorm with your mentors and peers about work-life harmony.
What are your priorities?
What strategies could you utilize to set yourself up for well-being?

How to create work-life harmony?

1. **Be Present:** When you're working, make sure you're fully engaged with your tasks and activities. Then, put your work responsibilities out of your mind when you're off the clock.
2. **Set Priorities and Boundaries:** Establish goals and priorities for work, school, and home. This will help you focus on the tasks that give you satisfaction, happiness, and a sense of accomplishment.
3. **Enjoy what you do:** If you're not already passionate about your work, find purpose in what you do and embrace it. If you don't have enough personal or family time, make changes to allow for those rewarding experiences.

Strategies

- Learn how to say no
- Accept your limits
- Evaluate your time
- Adjust your schedule
- Take care of your holistic well-being:
 - Heart: emotions & feelings
 - Mind: learning & curiosity
 - Body: movement & food
 - Spirit: gratitude & spirituality

Reference: online.maryville.edu/blog/work-life-balance-vs-harmony/

“

I was able to work towards a goal of feeling more confident in this field. Talking to my mentors about how they struggled and felt the same as I did but are now very successful in their field motivates me to keep going.

– SWE Mentee

”

WHAT WE’VE LEARNED | MENTEES

77% OF MENTEES REPORTED AN INCREASE IN:

Having **strong women engineer role models** in their life for mentorship and support

Being **confident in their networking skills** to find a job or internship

62% OF MENTEES REPORTED AN INCREASE IN:

Feeling **confident in their communication skills** to find a job or internship



NAVIGATING THE FIELD

MADELYNN'S STORY

Engineering Industry Environment

- Benefitted tremendously from the pilot program
- Lack of opportunities
- Boys Club – Construction
- Safe space to ask questions
- Nonjudgmental & supportive

“

...it was great to meet the students and learn more about what their plans are. It was nice to share my experiences to help them develop their careers. It has also been nice as this program provided an opportunity to connect with other INL employees who I may not interact with in my day-to-day job assignments.
– ***INL Mentor***

”

WHAT WE'VE LEARNED | MENTORS

Mentor Highlights

- Pods helped take the pressure off individuals
- New and fresh perspectives from students and colleagues
- Meeting over Zoom made connecting easy.
- Learned from other women's experiences in their careers and academic fields



SIGN-UP TO BE A MENTOR!

Components of the mentor role:

1. Time and endorsement from your company
 - Approximately 10 hours January – May 2023
2. Financial sponsorship either by company or individual (\$1000/mentor)
 - Directly impacts SWE mentees through a scholarship/award
3. Use the QR code to complete our survey/application

Email me at kschiffelbein@uidaho.edu with any questions!



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MORE WAYS TO PARTNER, MENTOR, AND SPONSOR

**VANDAL ENGINEERING
SIGNATURE PROGRAMS**



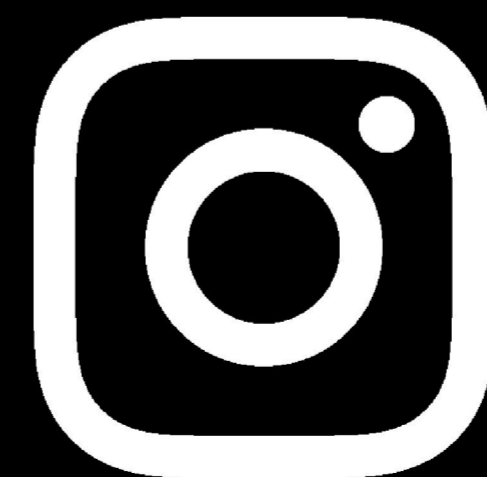
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SOCIETY OF WOMEN ENGINEERS

Empowering women to succeed and be recognized for their achievements as engineers and leaders.

JOIN OUR ORGANIZATION

Follow us @ui.swe





Partner with us WIE Day 2022!

WOMEN IN ENGINEERING DAY

SATURDAY, SEPTEMBER 24

WIE DAY 2022

WAYS TO PARTNER

- I** Share the news! Invite your kids, nibblings, friends, and schools!
- I** Sponsor a STEM Activity Fair booth and plan a mini activity
- I** Support WIE Day financially
- I** Register Here:
<https://futurevandals.uidaho.edu/register/wie-day-2022>

INTERDISCIPLINARY CAPSTONE DESIGN PROGRAM

**TOP 7
IN THE NATION**
for “infusing real-world
experiences into
engineering education”
through our Interdisciplinary
Capstone Design Program

– National Academy
of Engineering

- Collaborate in creative, industry-sponsored projects
- Gain hands-on experience in the engineering design process
- Create a thoughtfully engineered, tested and validated outcome or prototype
- Many projects result in patents and direct application in industry



UIDAHO.EDU/ENGR-CAPSTONE



UNLEASH THE SPIRIT OF INNOVATION



2022
EXPO
engineering ▲ design



Save the Date:
April 28, 2023

CO-OP

COOPERATIVE
EDUCATION PROGRAM

Benefits to Students...

EARN UP TO \$20,000+

*for each 6-month co-op
experience*

EXPLORE POTENTIAL CAREERS

at leading companies

ENGAGE IN IMPACTFUL WORK

*directly related to your
field of study*

BUILD YOUR PROFESSIONAL NETWORK

through personalized mentorship

GAIN A COMPETITIVE EDGE

when transitioning to the workforce after graduation

APPLY AND LEARN MORE AT
UIDAHO.EDU/CO-OP



BECOME AN INDUSTRY PARTNER

- I Reduce recruiting costs** by vetting students for future employment opportunities
- I Access the best talent** from students who bring new ideas, fresh perspectives and enthusiasm to your team
- I Build brand visibility** at Idaho's leading research institution with a statewide presence
- I Mentor students** through meaningful, hands-on experience
- I Grow your partnership** with nationally recognized faculty deeply connected to industry

<https://www.uidaho.edu/current-students/career-services/jobs-internships-co-ops/co-op/employer-resources>



JUDGE AT REGIONAL ISEF

**PROFESSIONAL ENGINEERS
NEEDED FOR JUDGING!**

- I** Location: U of I Moscow Campus
- I** Date: March 10, 2023
- I** Judging Starts: February 18, 2023
- I** Questions? Email:

idahosciencefairs@gmail.com



MATCH AN ISAC P3 GRANT

Mentorship and Ambassador programs rely on grants to support K12 STEM pipeline outreach, fund student stipends/scholarships, and invest in the future of future engineers.

- I** 50% match from Idaho STEM Action Center
 - North INNC Hub
- I** Support Vandal DEI and WIE Programming





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FOLLOW US



@uidahoENGR



IDAHO'S ONLY

*Exemplary status
bronze level institution for*

***DIVERSITY AND
INCLUSION***

— American Society for
Engineering Education

ENGINEER

LIKE A **VANDAL**



University of Idaho

College of Engineering

TOP 7

IN THE NATION

for infusing real-world experiences into engineering education through our Interdisciplinary Capstone Design Program

– National Academy of Engineering

NO. 1 BEST VALUE

Public University in the West

– U.S. News and World Report

HIGHEST

Early- and Mid-Career Salary

among Idaho's four-year public universities

– Payscale 2021 College Salary Report

92% GRADUATE WITH JOBS

or are enrolled in additional education or military service

– 2020-2021 National Association of Colleges and Employers Survey

MORE SCHOLARSHIPS AWARDED

than any other public engineering program in Idaho

– 2021-2022 Financial Aid Data