



Industrial Engineering Division

Spring 2024 Newsletter

The Industrial Engineering Division (IED) cordially invites you to attend the 131st Annual Conference and Exposition that will take place in Portland, Oregon from June 23-26, 2024. To register for the conference, visit the ASEE website [here](#). You can find the full conference schedule at-a-glance [here](#). For the specific IED events and announcements, please refer to the session locator [here](#) or to the following.

Note for All Presenters

All presenters will need to bring their own laptop to be used during the presentation. There will not be Wi-Fi provided at the convention center, so you will need to have all material needed to present on your computer and any adaptors necessary for connecting to HDMI.

M229 – Industrial Engineering Division Poster Session

Mon. June 24, 2024 9:15 AM to 10:45 AM

Room: Oregon Convention Center Exhibit Hall B, C, & D

Papers Presented:

1. **Preparing Engineering Students for Designing and Managing the Future of Work and Work Systems**

Dr. Priyadarshini Pennathur (University of Texas at El Paso), Dr. Arunkumar Pennathur (University of Texas at El Paso), Dr. Amirmasoud Momenipour (Rose-Hulman Institute of Technology)

M429A - Industrial Engineering Division Technical Session 1

Mon. June 24, 2024 1:30 PM to 3:00 PM

Room: Oregon Convention Center D136 (Moderated by Mr. Pelumi Olaitan Abiodun and Israa Azzam)

Papers Presented:

1. **A Utility-based Optimization Model for Allocating Student Teams to Community Projects**

Khalid Bello (University of Louisville), Dr. Faisal Aqlan (University of Louisville), Danielle Wood (University of Notre Dame)

2. **Training Teachers to Employ Design and Analysis of Computer Experiments for Research on Sustainable Building Design**

Mrs. Laura Thomason (Mansfield ISD/University of Texas at Arlington), Dr. Victoria C. P. Chen (University of Texas at Arlington), Dr. Erick Jones (University of Texas at Arlington), Dr. Jay Michael Rosenberger (University of Texas at Arlington), Jaivardhan Sood (University of Texas at Arlington), Vishnu Sharma Kaipu Parbhakar Sharma (University of Texas at Arlington), Soulmaz Rahman Mohammadpour (University of Texas at Arlington), Tahsirearl Dominick Smalls (Everman ISD/University of Texas at Arlington), Mrs. Jocelyn Sigler (University of Texas at Arlington), James Hovey (Affiliation Unknown)

3. **Incorporating an Entrepreneurial Mindset, Bio-Inspired Design, and STEAM Approach to Enhance Learning in a Computer Aided Design and Modeling Class**

Dr. Thomas Aming'a Omwando (Simpson University), Bhavana Kotla (Purdue Polytechnic Graduate Programs), Dr. Adel Alhalawani (Rose-Hulman Institute of Technology), Dr. Lisa Bosman (Purdue University at West Lafayette), Dr. Ashutosh Khandha (University of Delaware)

4. **Methodology to implement project-based learning (PBL) within the context of Operations Management**

Dr. Mahesh Kumar Pallikonda (Austin Peay State University), Dr. Hossain Ahmed (Austin Peay State University), Dr. Md. Ali Haider (Austin Peay State University). Dr. Ravi C. Manimaran (Austin Peay State University)

5. **Reimagining Industrial Engineering: Embedding Sustainability and Societal Impact in Course Design**

Dr. Corey Kiassat (Quinnipiac University)

T229 - Industrial Engineering Division Technical Session 2

Tue. June 25, 2024 9:15 AM to 10:45 AM

Room: Oregon Convention Center E142 (Moderated by Dr. Farid Breidi and Dr. Corey Kiassat, PhD, MBA, PE.)

Papers Presented:

1. **Fostering Curiosity among Industrial Engineering Undergraduates through Experiment-Centric Pedagogy**

Mr. Pelumi Olaitan Abiodun (Morgan State University), Vandana Pandey (Morgan State University), Dr. Oludare Adegbola Owolabi (Morgan State University)

2. **Putting the Project back in Project Management Courses**

Dr. Nina Miville (University of Miami)

3. **Empowering Quality Excellence: A 10-Day Engineering Boot Camp for Accelerated Learning**

Jakia Sultana (University of Texas at El Paso), Dr. Md Fashiar Rahman (University of

Texas at El Paso), Christopher Colaw (Lockheed Martin), Dr. Tzu-Liang Tseng (University of Texas at El Paso)

4. **WIP: Rewriting capstone: The unexpected solution to our assessment problem**
Dr. Janice Mejía (Northwestern University), Katherine Scharfenberg (Northwestern University), Dr. Jill Hardin Wilson (Northwestern University)
5. **Poetry writing as a creative task to enhance student learning**
Emma S. Atherton (University of Florida), Dr. Elif Akcali (University of Florida)

T329 - Industrial Engineering Division Technical Session 3

Tue. June 25, 2024 11:00 AM to 12:30 PM

Room: Oregon Convention Center F149 (Moderated by Dr. Nina Miville and Dr. Sabahattin Gokhan Ozden)

Papers Presented:

1. **Team Dynamics and Conflict Resolution: Integrating Gen AI in Project Based Learning to Support Students' Performance**
Enas Aref (Western Michigan University)
2. **Sensor-based Measurement of Physiological Response to Test Anxiety**
Sara Amani (Texas A&M University), Dr. Dianna Morganti (Texas A&M University), Dr. Kristi J. Shryock (Texas A&M University), Mr. Lance Leon Allen White (Texas A&M University)
3. **Awareness of Feature Importance in Artificial Intelligence Algorithms**
Dr. Ebisa Wollega (Colorado State University at Pueblo), Melissa Braddock (Affiliation Unknown), Dr. Lisa Bosman (Purdue University at West Lafayette)
4. **Improving Verification Skills for a Discrete-Event Simulation Model**
Dr. Sima Parisay (California State Polytechnic University at Pomona)
5. **Optimizing Virtual Learning: Advanced Recommendations for an AI Teaching Assistant**
Mr. Md Abdullah (University of Texas at Arlington), Mr. Gowtham Nageshwara Rao (University of Texas at Arlington), Faith Lauren Sowell (University of Texas at Arlington), Vibhav Nirmal (University of Texas at Arlington), Dr. Shuchisnigdha Deb (University of Texas at Arlington)

T529-Industrial Engineering Division Business Meeting

Tue. June 25, 2024 3:15 PM to 4:45 PM

Room: Hyatt Regency Portland (HQ Hotel), Multnomah Room

This year's Business Meeting will be an in-person event only. Meeting minutes will be distributed afterwards. If you are interested in running for an officer position and are not able to attend, see the Call for Officer Position section below for more information.

Proposal of Bylaw Amendment

The IED Board Members would like to bring forth the following amendment to the [Bylaws](#) of the division regarding Section 3: Membership. Concerns around the decrease in number of dues paying members has caused the IED Board to consider actions to alleviate any burdens

preventing individuals from joining the Industrial Engineering Division. If membership falls below a threshold, the division is at risk of being dropped by ASEE.

Original Bylaw Language – Section 3. Membership

“Membership of the Division shall consist of those members of the Society who wish to affiliate with the Division and pay (\$4) annual membership dues charged by ASEE.”

Proposed Changes to Bylaw Language – Section 3. Membership

“Membership of the Division shall consist of those members of the Society who wish to affiliate with the Division and pay ~~(\$4)~~ \$0 in annual membership dues until frozen IED account balance is released and one year beyond. ~~charged by ASEE.~~ The \$4 annual membership dues charged by ASEE will be reinstated one year following the release of frozen dues.”

Proposed Changes to Bylaw Language (Clean) – Section 3. Membership

“Membership of the Division shall consist of those members of the Society who wish to affiliate with the Division and pay \$0 in annual membership dues until one year after frozen IED account balance is released. The \$4 annual membership dues charged by ASEE will be reinstated one year following the release of frozen dues.”

T722 - Joint Divisions Social Event

Engineering Management, Engineering Economy, Industrial Engineering, Systems Engineering
Tue. June 25, 2024 7:00 PM to 9:00 PM

Metropolitan Tavern (Northside Area) <https://mettavern.com/>

The Metropolitan Tavern is located across the street from the Convention Center. This is a ticketed event, \$85. Dinner is provided, buffet style, and a cash bar.

W329 - Industrial Engineering Division Technical Session 4

Wed. June 26, 2024 11:30 AM to 1:00 PM

Room: Oregon Convention Center E146 (Moderated by Dr. Hossain Ahmed and Dr. Dale T. Masel)

Papers Presented:

1. **Mixed Reality as a Teaching Tool for Improving Spatial Visualization in Engineering Students**
Ms. Israa Azzam (Purdue University at West Lafayette), Dr. Farid Breidi (Purdue University at West Lafayette), Dr. Faisal Aqlan (University of Louisville), Dr. Jose M. Garcia (Purdue University at West Lafayette), Paul Asunda (Purdue University at West Lafayette)
2. **Warehouse Augmented Reality Program (WARP): A Web Tool for Warehouse Design and Operation Education**
Eric John Estadt (Pennsylvania State University at Abington), Khoa Nquyen (Pennsylvania State University at Abington), Kevin Skinner (Pennsylvania State University at Abington)

University), Dr. Ashkan Negahban (Pennsylvania State University at Great Valley), Dr. Omar Shour (Pennsylvania State University at Behren College), Dr. Sabahattin Gokhan Ozden (Pennsylvania State University at Abington)

3. Use of Virtual Reality to Improve Learning Experience on a Lean Manufacturing Course

Dr. Gibrán Sayeg-Sánchez (Tecnologico de Monterrey) Dr. Nicolás Amado-Moranchel (Tecnologico de Monterrey), Dr. Andres Esteban Acero (Tecnologico de Monterrey)

4. Enhancing Engineering Education Through Hands-on Virtual Reality Training Experiences: Developing Skills in the Continuous Improvement of Manufacturing Systems

Dr. David Parsley (University of Kentucky)

Call for Officers

The IED is seeking nominations for the following positions for 2024-25:

Program Chair

Secretary/Treasurer

Diversity Committee Delegate

The IED Board comprised of the Secretary/Treasurer, Program Chair-Elect, Program Chair, Division Chair, and Awards/Past Division Chair positions operates on a five-year rotation, in the order provided. The time commitment is minimal except in the Program Chair year.

The Diversity Committee Delegate is elected annually.

Please consider nominating someone for any of these positions; self-nominations are welcome. If you have questions, feel free to contact anyone currently on the IED Board. Nominations can be made at the Town Hall Business Meeting on Tuesday, June 25th and in advance by contacting any of the current members of the Board.

If you are unable to attend the Business Meeting and would still like to run for a position, please create a single Google Slide introduction of yourself that will serve as your nomination. These need to be sent to Thomas Omwando (tomwando@simpsonu.edu) by Sunday, June 23rd at 5:00 PM.

IED Board Members Contact Information

The following are the IED officers until the end of the 2024 ASEE Conference. After the conference, the Division Chair, Program Chair, Assistant Program Chair, and Secretary/Treasurer will move up one position.

Division Chair:

McKenzie Landrum

landrum@ise.ufl.edu / (352) 294-7732

Program Chair:

Thomas Omwando

tomwando@simpsonu.edu / (530) 226-4516

Program Chair-Elect:	Vacant
Secretary/Treasurer:	Megan Hammond hammondm@uindy.edu / (317) 788-3512
Awards/Past Division Chair:	Lisa Bosman lbosman@purdue.edu / (765) 496-0267
Directors:	Rick Olson (term ending 2024) r_olson@sandiego.edu / (619) 260-6853
	Letitia Pohl (term ending 2024) lpohl@uark.edu / (252) 737-1031
	Paul C. Lynch (term ending 2025) PCL120@psu.edu / (814) 898-6387
	Raymond Smith III (term ending 2025) smithraym17@ecu.edu / (252) 328-9722
Webmaster:	Lawrence Whitman larry.whitman@wichita.edu / (316) 978-5907
Diversity Committee Delegate:	Karen Bursic kbursic@pitt.edu / (412) 624-9837
P-12 Committee Delegate:	Justin Kyle justin.kile@quinnipiac.edu / (203) 582-3372
PIC Chair	Katy Colbry colbryka@msu.edu / (517) 432-1064

2025 ASEE Annual Conference and Expo IED Call for Papers

2025 IED Theme: Generative AI and Industrial Engineering Education

The Industrial Engineering Division of the American Society for Engineering Education seeks papers for presentation at the 132nd Annual Conference and Expo centered around Generative AI and Industrial Engineering Education.

Generative AI refers to a subset of artificial intelligence (AI) techniques focused on generating new, original data or content. Integrating generative AI into industrial engineering education empowers students to leverage cutting-edge technologies for innovation, optimization, and problem-solving in industrial settings, ultimately driving improvements in productivity, efficiency, and sustainability. Generative AI holds significant importance for Industrial Engineering in the following areas: *Innovation and Optimization; Complex Problem Solving;*

Simulation and Modeling; Automation and Decision Support; Education and Skill Development; and Interdisciplinary Collaboration.

Relevant submissions are welcome from all engineering disciplines. Considerations for acceptance include the level of innovation, technical merit, demonstrated outcomes and relevance to industrial engineering education. Authors are encouraged to submit work beneficial to other IE faculty, including strategies and implementation. Purely technical papers that have no education component or papers that describe courses that will or have not been taught will most likely not be accepted. The IED strongly encourages submissions of diversity, equity, and inclusion related papers as well.

Newsletter Submissions Welcome!

The most valuable newsletters are the ones that contain news of interest to the members submitted by the members. If you have something that you'd like to share with the IED, please forward the details to our newsletter editor. The newsletter editor for Fall 2024 and Spring 2025 is Megan Hammond (hammondm@uindy.edu). Anything that might be of interest to members are welcome, including:

- Call for papers for conferences related to engineering education, which includes ASEE regional conferences
- Reminders of deadline submission to agencies funding educational research
- Announcements of members receiving teaching awards or other related accolades
- Announcement of papers related to industrial engineering education

Please help add valuable information to promote collaboration, innovation, and impact in the field of industrial engineering!

Visit the ASEE Webpage for more information about the IED <https://sites.asee.org/ied>.