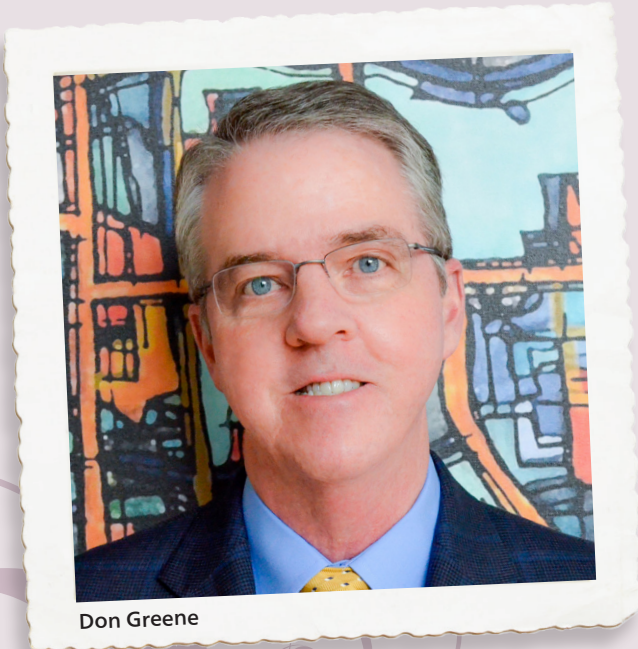


# SEIMS

## Supporting strength and longevity



On behalf of our IISE leaders and staff, I wish you a Happy New Year and tremendous success in 2024.

As we recover from our holiday activities and look ahead, it's a sobering thought to realize we're 24 years into this third millennium. The latest generation, dubbed Alpha (2010s-2025) – the first to be born entirely in this 21st century – will be joining the professional ranks in another decade or so.

We're living in a time where we're consumed by radical change on all fronts from economic to environmental, driven by the rapid pace of technology that is equally parts thrilling and disturbing. (No, ChatGPT did not write this.)

Where do ISEs stand in these VUCA (volatility, uncertainty, complexity and ambiguity) times? How does the problem-solving profession harness the AI tools that are proliferating and advancing at breakneck speed?

For starters, in every issue of this magazine, authors practicing or teaching in the profession offer insights and address trends to help you do your job better. Your member magazine is one of the many resources where you can find answers and make an impact.

Indeed, the Institute is a central hub for industrial and systems engineers working daily on vital research and endeavors designed to "solve the complex and critical problems of the world," as IISE's mission states. With its various societies, divisions and chapters, ISEs come together to share, interact and advance not only their careers but the field at large.

Coming off its 75th anniversary in 2023, the Institute continues to be your international resource with year-round meetups, webinars, conferences, training, awards, scholarships, podcasts, journals and more at your disposal.

At its October 2023 meeting in metro Atlanta, IISE's Board of Trustees underscored the importance of the Institute to the profession, acknowledging that it is the only association that supports accredited industrial engineering programs through ABET Inc.

IISE is home to thought leaders in academia and industry through CIEADH (Council of Industrial Engineering Academic Department Heads) and CISE (Council on Industrial and Systems Engineering). It also produces the ISE Body of Knowledge – a repository of essential information for the profession and is made up of knowledge areas representing a taxonomy of relevant industrial and systems engineering concepts ([iise.org/BodyofKnowledge](https://iise.org/BodyofKnowledge)).

Last year, IISE leaders talked about the importance of the Institute to their lives and livelihoods in two videos on [youtube.com/iisechannel](https://youtube.com/iisechannel): "#IISE75 – IISE Senior Leadership Shares Their Stories" and "#IISE75 – The Difference That IISE Membership Can Make." Be sure to watch and learn from fellow ISEs sharing their relatable and memorable experiences.

As we turn the page on another year and face myriad challenges including the moving target that is technology, let IISE be your home

### IISE 2024 conferences

- **Healthcare Systems Process Improvement Conference**, Feb. 13-15, Crowne Plaza Atlanta Perimeter at Ravinia, Atlanta, [iise.org/HSPI](https://iise.org/HSPI).
- **Applied Ergonomics Conference**, March 25-28, Kentucky International Convention Center, Louisville, Kentucky, [iise.org/AEC](https://iise.org/AEC).
- **Annual Conference & Expo**, May 18-21, Montréal Convention Centre, Montreal, Canada, [iise.org/Annual](https://iise.org/Annual).

# Says... through IISE in 2024

base. And while we have online, on-demand offerings and can meet online, let's learn and be inspired in person. Virtual sessions are very valuable, but in-person connections simply cannot be replaced.

Right out the gate in 2024, you have game-changing conferences in February, March and May plus many IISE university regional conferences ([iise.org/conferences](http://iise.org/conferences)). I hope to see you at one or more of these can't-miss events: Healthcare Systems Process Improvement Conference, Feb. 13-15, Atlanta ([iise.org/HSPI](http://iise.org/HSPI)); the Applied Ergonomics Conference, March 25-28, Louisville, Kentucky ([iise.org/AEC](http://iise.org/AEC)); and the Annual Conference & Expo, May 18-21, Montreal, Canada ([iise.org/Annual](http://iise.org/Annual)).

To sustain this valuable community that elevates the profession, we need you. Thank you for your dedication, your commitment and your unwavering support of the Institute and the industrial and systems engineering profession it serves.

— Don Greene is an IE graduate of Georgia Tech,  
an IISE Fellow and CEO of IISE.

## Finding the 'right' production management system

With Industry 4.0 in full swing, there are so many solutions available for a variety of production management systems with more appearing daily. For this purpose, production management systems can be classified as machine monitoring systems, computerized maintenance management systems, manufacturing execution systems, quality management systems, tool data management, etc.

If your organization is considering these options here are some words of advice:

**Baseline:** You must have policies and procedures of how you operate as a business before digitizing the process.

**Problem statement:** What problem are you trying to solve?

Whether your company is having difficulty meeting delivery deadlines, cost overruns or quality issues, you need to know the problem. Implementing these systems isn't a silver bullet where the problem will magically go away once in place.

Are you targeting overall equipment effectiveness (OEE), machine utilization, tooling costs, going paperless, etc.? Define what success looks like.

**Action:** Have an action plan to do something with the data.

Even if it is not comprehensive, have a plan. Organizations will often implement these systems without a problem statement or plan to use the data, then throw up their hands in disgust when the issues aren't resolved on their own. It takes time and effort to see positive results.

**Mutual success:** Partner with a supplier or consultant that has actual demonstrated results. Ask about the number of instances of their solution and the average ROI. Ask for case studies or videos. Then do math to determine how successful they have been.

These same considerations could be said for automation systems as well.

## The SEMS mission, leadership

The Society for Engineering and Management Systems' mission ([iise.org/SEMS](http://iise.org/SEMS)) is to research, develop and promote engineering and management systems that support organizational transformation, increase competitiveness, and improve sustainability and social responsibility.

Here is the current SEMS Board of Directors:

- President Sandy Furterer (2023-2024)
- Past President Christina Rinaudo (2023-2024)
- President-elect Michael Graul (2023-2024)
- Sheila Barnett (2023-2026)
- Dean Bartles (2022-2025)
- Beth Cudney (2023-2026)
- Mindy Holmes (2022-2025)
- Joseph Michels (2021-2024)
- Amir Momenipour (2022-2025)
- Casey Robelot (2021-2024)
- Matthew Townsend (2022-2025)



Matthew Townsend

As an organization that sells and integrates these systems, beware of potential suppliers that do not ask for this information. Finally, be cautious of terms such as “turnkey” and “plug-and-play.” Rarely is this the reality.

— *Matthew Townsend is CEO of Sparc Engineers (www.sparcengineers.com) and a member of the SEMS Board of Directors. Contact him at matt@sparcengineers.com.*



Amir Momenipour

## Nominations due Feb. 9 for SEMS Teaching Excellence Award

On behalf of the SEMS award directors, I am pleased to announce the introduction of the SEMS Teaching Excellence Award. This award, offered for the first time by SEMS, seeks to honor an individual who has significantly contributed to the knowledge and practice of engineering and management systems in industrial engineering education.

The award will be presented during the IISE Annual Conference & Expo in Montreal May 18-21, with the recipient being acknowledged at the SEMS meeting. Eligible nominees are IISE and SEMS division members, with nominations accepted from faculty colleagues or students who have completed a course taught by the candidate. The nominated course must be within an industrial engineering or related program, highlighting the integration of engineering and management systems, and should have been developed and taught by the nominee at least twice in the last five years.

Nomination packages are due by Feb. 9, with the winner to be notified by March 9. Learn more at [link.iise.org/sems\\_teachingaward](http://link.iise.org/sems_teachingaward).

The nomination package for the award must include the following components:

- A table of contents, which should not exceed two pages.
- Letters of support from the nominator and two other individuals. It's important that at least one letter comes from a faculty member and one from a student who has taken the course.
- A detailed course syllabus along with samples of course materials. The combined length should not exceed 20 pages.
- The curriculum vitae of the nominee, detailing their professional and academic background.
- A one-page reflective teaching statement and teaching philosophy authored by the nominee.
- Summarized copies of teaching evaluations, including student comments that highlight the impact of the course.

The evaluation criteria include: leadership, content relevance, applied learning, innovation and student satisfaction.

All nomination packages must be compiled into a single PDF file or a single compressed/zipped file containing all the required materials. Please send the complete nomination packages to Amir Momenipour at [momenipo@rose-hulman.edu](mailto:momenipo@rose-hulman.edu) and Sandy Furterer at [furterer.6@osu.edu](mailto:furterer.6@osu.edu). For any additional information or inquiries, feel free to reach out to me, Sandy or Amy Straub at IISE ([astraub@iise.org](mailto:astraub@iise.org)).

*Amir Momenipour, Ph.D., is an Assistant Professor in the Department of Engineering Management at Rose-Hulman Institute Of Technology in Terre Haute, Indiana. He is a member of the SEMS Board of Directors.*

## Lend a helping hand: A call for volunteers to serve SEMS

If you are interested in getting involved with SEMS, there are always numerous opportunities for volunteers. The society needs people to help with new initiatives and ongoing activities like conference planning, newsletters and *Industrial Management* magazine. If you have ideas and suggestions related to how to improve the value that industry members receive, please contact SEMS President Sandy Furterer at [furterer.6@osu.edu](mailto:furterer.6@osu.edu).