

Systems Engineering Division

The Systems Engineering Division (SED) promotes education in systems thinking, systems engineering, and systems science at all levels of education and for different delivery modes, including distance education, hybrid, and traditional classroom delivery. SED invites abstracts for papers and proposals for sessions, including technical sessions, workshops, panel discussions, and distinguished speakers.

The Systems Engineering Division is looking for standard submissions that address one or more aspects of systems engineering education, including but *not* limited to:

- Systems thinking applications in non-SE courses or SE courses,
- Collaboration between SE educators and those in non-SE disciplines,
- Use of SE representation and modeling tools in SE or non-SE classrooms,
- Outreach of SE programs to the K-12 community,
- Curricular strategies, advancements, and lessons learned to foster SE integration,
- Case studies of ABET/EAC accreditation for SE programs,
- Incorporating real-world SE challenges into the SE curriculum,
- Case study of interdisciplinary capstone courses that include SE students,
- Case study of systems engineering leadership and systems engineering management-related programs and courses that encompass both the technical and professional competencies,
- Emerging trends: cyber security integration, artificial intelligence, socio-technical systems, etc.,
- Position papers on issues of current weight for SE education broadly, and
- Other - this category emphasizes other well-justified topics of interest for SED members.

SED work-in-progress (WIP) papers will be submitted under general ASEE guidelines. WIP papers will be presented in a special format:

- **Feedback-Intensive format for Work-In-Progress (WIP) submissions:** This format allows authors to pitch their work with a two-slide (back and front of a postcard) overview of work in five minutes or less. After presenters complete their pitches, attendees can visit with and give feedback to the authors.

One special session will focus on issues with Diversity, Equity, and Inclusion(DEI).

- **Focused session topic on DEI issues:** Authors from SED plus IE and EM divisions are encouraged to submit papers focusing on **Diversity, Equity, and Inclusion** issues, including position papers that map possible paths to strengthening DEI topic penetration in our SE classrooms.

Submissions that leverage SE principles, tools, or techniques as part of a curriculum are welcome. All paper submissions are publish-to-present. Submission may include classroom applications, exploratory topics, research reports, and works in progress (WIP). Abstracts shall be 250-350 words in length. Paper submission is a two-step review process consisting of abstract submission, review, and potential acceptance, followed by a full manuscript submission and review. At least one author for each paper must register for and present the paper at the conference. Submission guidelines, deadlines, and other pertinent information are available on the ASEE 2023 Annual Conference website.

All paper submissions will be considered for the **SED Best Paper Award**.

Contact Jon Sticklen, Systems Engineering Division Program Chair, at sticklen@mtu.edu.