INCOSE at 31
Guiding the Future of Systems Engineering

Annual Impact Statement

Inspiring and guiding the direction of systems engineering across diverse stakeholder communities.

- We are the premier choice of systems engineers for professional development.
- With 31 years of experience and 18,500 members, we are shaping the future of systems engineering.
- We interact with systems engineers across the globe on a daily basis to set standards and solve problems.

Why INCOSE?

18,500 Committed Members
120 Corporate Members
55 Working Groups
74 Chapters Worldwide
68 Countries with Active Members

bit.ly/incose-member
email: info@incose.org
Corporate Advisory Board

“Voice of the Corporate Customer” for INCOSE—
- Provides advice on overall direction, focus, and priorities
- Brings diverse perspectives on industry, government, and academia.
- Includes the Academic Council—currently 20 Universities
- Acts as a conduit between INCOSE and CAB organizations
- Provides additional resources for INCOSE and support for chapters
- Enables corporations to influence the direction of Systems Engineering
- Allows CAB members to meet with industry leaders, grow their global footprint, and see how other industries apply Systems Engineering to solve business problems
- Encourages connections and networking with competent certified Systems Engineers at all levels through INCOSE events

Institute for Technical Leadership

- A development program for active INCOSE members seeking to improve their leadership skills in an open, collaborative environment.
- This program is a blend of online synchronous learning and asynchronous team collaboration to deliver all content and learn together. The IW and IS provide the opportunity to learn and interact face-to-face.
- We started in 2015 and are now working with our 6th Cohort!

Certification

- INCOSE Certification Path
- Join INCOSE
- Complete Professional Development Requirements
- Renewal Not Required for ESE P Renewal Process
- ASEP 5 year cycle, CSEP 3 year cycle
- Chief systems engineers with demonstrated technical expertise (verified by oral review) and leadership with 20+ years of experience

Growth Since Inception

- 3768 Current Active Certifications
- Cohort Participants by Location.
- Growth Since Inception

Cohort Participants by Location.
Value to Our Membership and the Systems Engineering Community

Products and Publications
- Working groups and communities collaborate to create our products and publications
- INCOSE guides and contributes to groups working to determine and set international standards relating to system topics.

Chapters
- More than 70 chapters in 68 countries

INCOSE
BRASIL
AEIS
SESA
INCOSEUK
Charleston, SC Chapter
Greater Philadelphia
MICHIGAN
GREATER PHILADELPHIA
CHARLESTON, SC CHAPTER
MICHIGAN

Student Outreach
- Student Divisions are operated as a component of nearby INCOSE chapters. Undergraduate and graduate students become actively involved in INCOSE.
- INCOSE supports outreach designed to interest and engage K–graduate level activities and research.

Events and Networking
- International and regional conferences

Virtual Community
- International and regional virtual events for continuing education, collaborative work, and social interaction with your SE peers.
Guiding the Future of Systems Engineering

**Sustainability, Executing the Vision**
- A systems approach to a better world through internal initiatives and participation in external programs like the UN Civil Societies Conference

**Meeting Tomorrow’s Complexities**
- Systems Engineering Research
- Artificial Intelligence
- Model Based Systems Engineering
- Digital Information Exchange
- System of Systems Engineering
- Simulation ...

**Future of Systems Engineering**
- Purpose: Evolve the practice, instruction and perception of SE
- Goal: Create a road map that drives the evolution of SE
- Scope: Identify needs, priorities and means for transforming SE

The FuSE initiative spans INCOSE Working Groups, other initiatives and periodicals

ISO/IEC/IEEE 15288

Find us on Social Media
Accomplishments and Initiatives 2021

In 2021 our virtual platforms increased INCOSE global participation, collaboration, and membership. We also:

- Introduced new IT services for member collaboration
- Established a Diversity, Equity, Inclusion Asc.D position and advisory committee
- Increased social presences and started accepting advertising on Web, Social Media, and in our Publications
- Started beta testing of Teams (1000 users), Yammer, and other collaboration tools for groups to work remotely
- Hosted First ever Virtual IW—Largest attendance ever
- Continued to offer a global conference platform for virtual major INCOSE (IS and IW) and regional chapter conferences resulting increased participation globally
- Established Volunteerism Asc.D position
- Increased professional support to update and standardize branding across the organization, publications, and social media
- Added Online Testing for SEP certifications program and received a significant increase in ESEP applications
- Continued virtual reSEPtions to welcome new and upgrading systems engineers to the certification process
- Formed new certification academic equivalency agreements—with University of Alabama, Huntsville.
- Rebranded GRCSE to SEEE, updated content
- Established a STEM Working Group
- Increased availability of INCOSE presentations on virtual platforms
- Introduced two new awards—SE Journal Top Reviewer and Certification Champion (July 2021)
- Developed first product for SE Heuristics Initiative for release in 2022
- Prepared PDP for Phase I launch in 2022
- Established an Ast.D Events Portfolio Management
- Continued growth of Virtual Community Offerings
- Added 4 CAB Members
- Awarded the 2nd ever Presidential Benefactor Award to Azad Madni
- Completed SE Vision 2035 Major Review
- Reviewed SE Handbook Ed. 5 and comments submitted
- Released SETDB-IS2021
- Formed INCOSE NZ Chapter
- Renewed MOUs—NAFEMS, PPI, and PMI

CAB Achievements and Future Goals

CAB members, 118 currently (with several pending) played a major role in guiding and supporting INCOSE as we break free to the new normal. They:

- Provided 50 CAB leaders and SMEs to review the INCOSE SE Vision 2035
- Reviewed and commented on the Version 5 of INCOSE SE Handbook
- Nominated 9 individuals for the 7th Cohort of INCOSE’s Technical Leadership Institute
- Continued to work with working groups and initiatives to complete the “Needs Activities” with artifacts finished in 2021
- Stood up a Panel for IS 2021, “To Vee or not to Vee, Re-envisioning Verification and Validation”

Members

- 41% CAB Associate Members
- 30% Sector 1 Members
- 22% Sector 2 Members
- 7% Sector 3 Members
- 41% of members are added through CAB participation
Recurring Publications and Events

- Letters from President
- Newsletters
- Insight Magazine
- Systems Engineering Journal
- Board of Director Meetings, now virtual
- Systems Exchange Cafes, every 2 weeks with Topics of the Month
https://www.incose.org/about-incose/community/virtual-cafe

2021 Publications and Products

- SE Vision 2035 Major Review Completed
- SE Handbook Ed. 5 Major Review Comments Submitted
- SETDBHS2021 released

Regional Conferences

- Nov. 2020: UK ASEC
- April 2021: 4th CSD&M Asia Conference and INCOSE Beijing Summit
- April 2021: INCOSE and Aeronautical Society of India MBSE Summit
- May 2021: IPEC, SESA Event
- Sept. 2021: Western States Regional Conference, San Diego, CA, USA
- Sept. 2021: 9th Nordic Systems Engineering Tour, Helsinki Stockholm, Oslo, Copenhagen, Hamburg
- Oct. 2021: EMEA Workshop, Sevilla
- Oct. 2021: SESA Workshop, ASEW
- Oct. 2021: NAFEMS World Congress, INCOSE Track
- Nov. 2021: INCOSE Human Systems Integration Conference, San Diego, CA

INCOSE VIRTUAL COMMUNITY

ReSEPtions Held

- Diversity, Equity, Inclusion
- BOD position recommended

SEBOK v 2.3 Goes Live

- First Mini Event SoSE 450+ attendees

SEBOK v 2.3 Goes Live

- 1st Virtual IW—Largest Ever
- Online Certification Testing goes live
- Diversity, Equity, Inclusion and Volunteerism
- Asc.Ds established

BOD approves
2021 budget

- BOD establishes Ast.D Events Portfolio Mgmt.

BOD Meeting

- 2nd Virtual JLM

- 31st IS (Virtual)