INCOSE

INCOSE WELCOME CENTER

- Welcome/Introduction (5 minutes)
- INCOSE Overview (10 min)
- Featured Presentations (30 minutes)
- Guide Breakout Session (10 minutes)
- Welcome Center Café event Closeout (5 minutes)

Presented By New Member Engagement Team (NMET) (nme@incose.net)

New Member Welcome Center

Resources for New Members

Recordings and presentations from past New Member Café Events

About INCOSE Overview

Ways to engage in INCOSE

Learning and Development

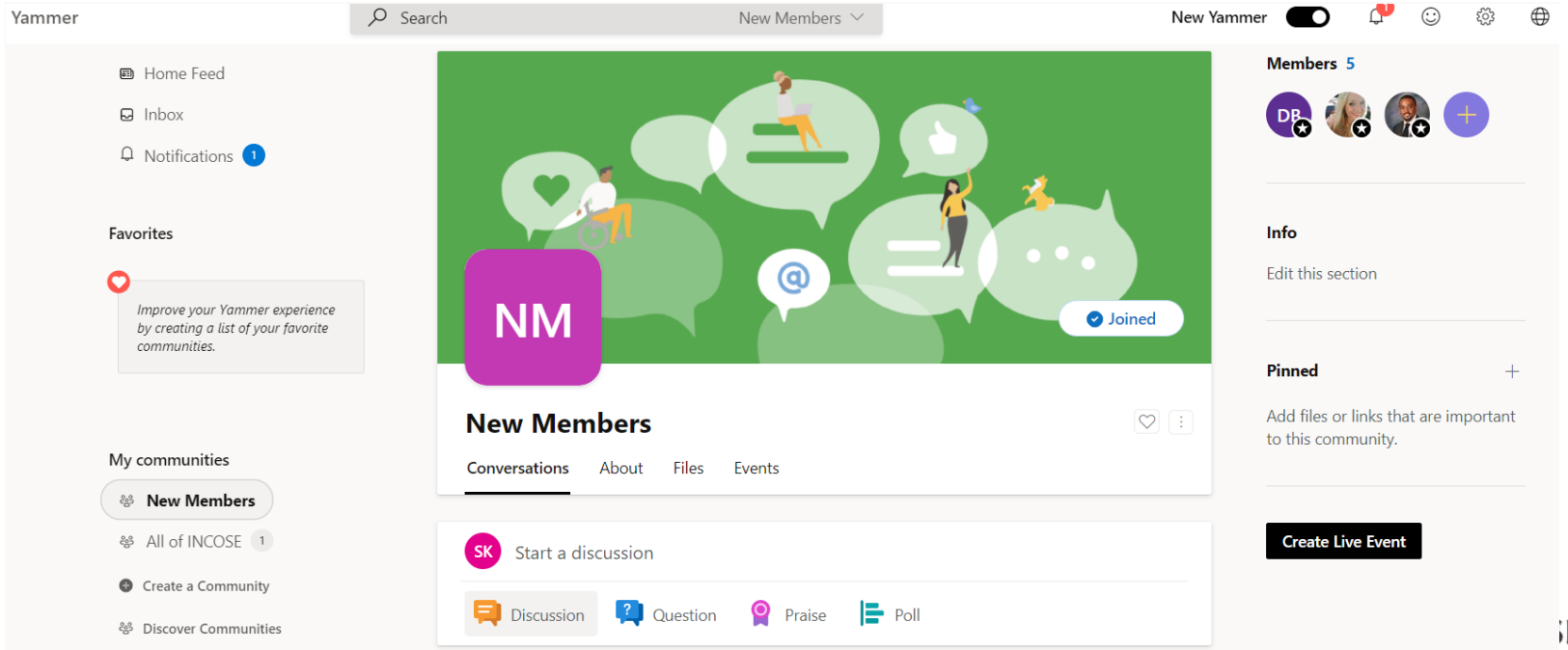
Publications

Growing your Career

Welcome Center cafes aim to onboard, orient and communicate with new members in their initial INCOSE journey
New Member Guides are senior, experienced INCOSE members who connect and engage with new members

New Member Yammer Community

- New Yammer community will be created
- This is a community for YOU, INCOSE New Members to network and discuss topics of interest
- www.yammer.com and login with your @incose.buzz account when assigned



INCOSE

International Council on Systems Engineering

A better world through a systems approach

CONNECT

LEARN

LEAD

PROSPER

INCOSE is the premier choice of systems engineers for professional development. With over 30 years of experience, we are shaping the future of systems engineering. We interact with systems engineers across the globe on a daily basis to set standards.

21,000

Members and CAB Associates

126

Corporate Members

52

Working Groups

65

Chapters Worldwide

75

Countries with Active Members

Why Join INCOSE?

- INCOSE is the global Systems Engineering professional society – providing the **opportunity for life-long learning** in systems approaches.
- A community of peers, **resources** for your **career**, and a place to be a **leader.**
- INCOSE members stand out and are often sought after as **experts**. INCOSE members share practices and learn from each other.
- INCOSE members create **products**, produce **events** and represent the organization in international forums.
- INCOSE members increase the body of knowledge and **advance the practice** of systems engineering.
- **Network** with over 21,000 members in 75 countries.
- Increase your professional stature with the INCOSE Systems Engineering Professional **Certification.**

Mission and Vision

VISION: A better world through a systems approach.

MISSION: To address complex societal and technical challenges by enabling, promoting, and advancing Systems Engineering and systems approaches.

OBJECTIVE: Global leader for systems engineering professionals for career development.

FUTURE: Lead the future of systems engineering, academically, in emerging domains, and in practice.

Membership Benefits

A global network of colleagues who understand systems engineering

Certification Opportunities

Access to quarterly e-Publications, *INSIGHT* and *Journal of Systems Engineering*

Electronic version of the Systems Engineering Handbook

Collaborate with experts and practitioners **worldwide**

Exclusive access to INCOSE Connect, the collaborative space for **INCOSE** Members Only

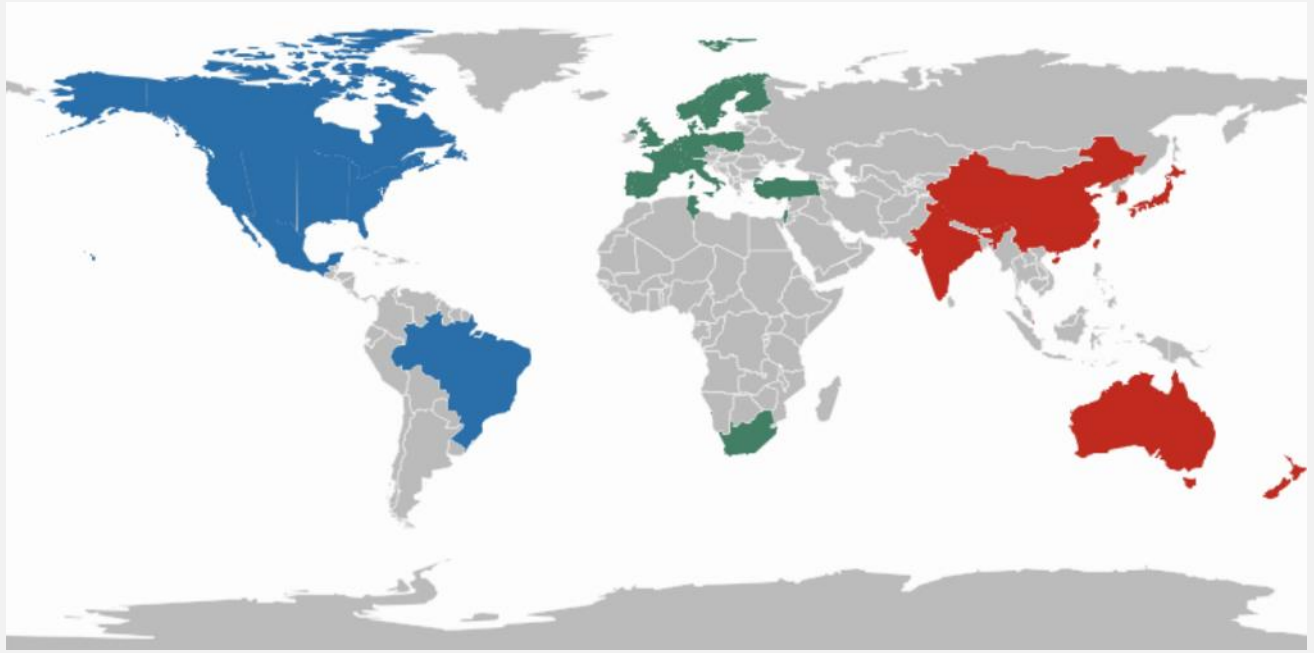
Member discounted registration to the International Workshop and International Symposium.

INCOSE

65 Chapters Worldwide

Chapters play an essential role in the achievement of INCOSE's goals and objectives:

- Organizing a multitude of professional and social programs
- Attracting new members from industry, government and academia
- Supporting technical activities striving to advance the state and art of systems engineering
- Showcasing INCOSE as the international authoritative body on systems engineering that it is.



LEARN MORE
Incose.org/chapters

Working Groups

INCOSE has over 50 active Working Groups. Some of the Working Groups are:

- Artificial Intelligence Systems
- Automotive
- Human Systems Integration
- MBSE Initiative
- Natural Systems
- PM-SE Integration
- Requirements
- Smart Cities
- Social Systems

Working groups are the resource practitioners need.

Discuss, collaborate, share in person, and online with a wide diversity of interests.

Create products to advance the state, art and practice of systems engineering.

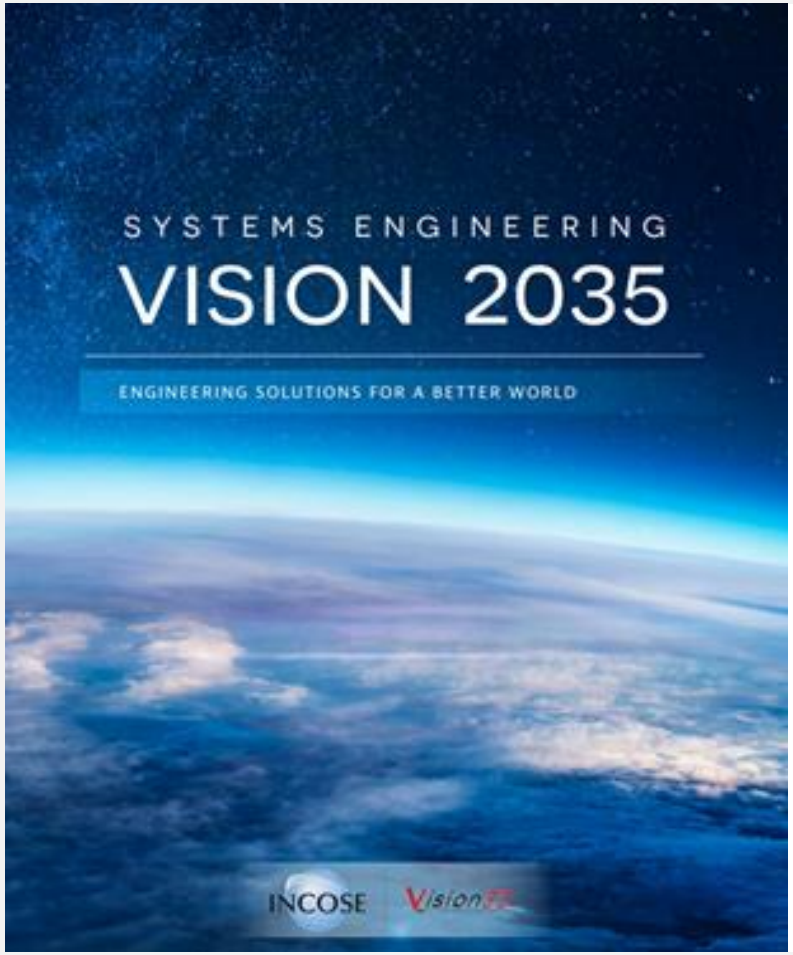
Help develop and review international standards

Bring value to other INCOSE stakeholders in your interest area

WGs run events, workshops, panels and much more

LEARN MORE: incose.org/workinggroups

Systems Engineering Vision 2035



This Systems Engineering Vision was sponsored by INCOSE and produced by a team of leaders from the systems community, with inputs from across industry, academia, and government. The Systems Engineering Vision 2035 addresses:

- The **Global Context for Systems** Engineering
- The **Current State of Systems Engineering**
- The **Future State of Systems Engineering**
- **Realizing the Vision**

We encourage you to work with INCOSE to help realize this vision.

The complete **Systems Engineering Vision 2035** is available as a website and PDF

LEARN MORE: incose.org/sevision

INCOSE FuSE

Future of Systems Engineering

FuSE Vision: Inspire the Global Community to Realize the Vision of SE

Initiatives: TLI and SySTEAM

The Technical Leadership Institute (TLI) is a global network of INCOSE members committed to improving technical leadership skills to better address the complex sociotechnical challenges of the twenty-first century. TLI members come from a wide range of countries.

LEARN MORE:
incose.org/tli

SySTEAM aims to promote a more just, equitable, and transparent approach to education in general, and interdisciplinary systems thinking/systems engineering competencies in particular, aimed at reducing disparities in educational quality, access, and competency attainment.

LEARN MORE:
incose.org/systeam

Initiatives: Diversity, Equity and Inclusion & EWLSE

Policy DEI-100 was established for the Diversity, Equity, and Inclusion (DE&I) initiative as an imperative effort within INCOSE to ensure that structures and mechanisms are in place to make INCOSE an organization where everyone can comfortably be their authentic self, recognize themselves in other members, and have an equal voice and opportunity in their interactions within the organization.

Strategic Goals of DEI:

- Goal #1: Affirming greater inclusion and diversity within INCOSE membership.
- Goal #2: Recruitment of more members from diverse backgrounds. Work is already underway to achieve Goal #2. New Membership Engagement (NMET) Diversity Equity & Inclusion (DEI)

LEARN MORE: incose.org/dei

EWLSE's mission is to create an open systems engineering environment welcoming to all; promote the demonstrated value of women as systems engineers and leaders; engage women in engineering and systems engineering at all levels of education around the world; and enable increased participation and retention of women in systems engineering leadership.

LEARN MORE: incose.org/ewlse

MBSE

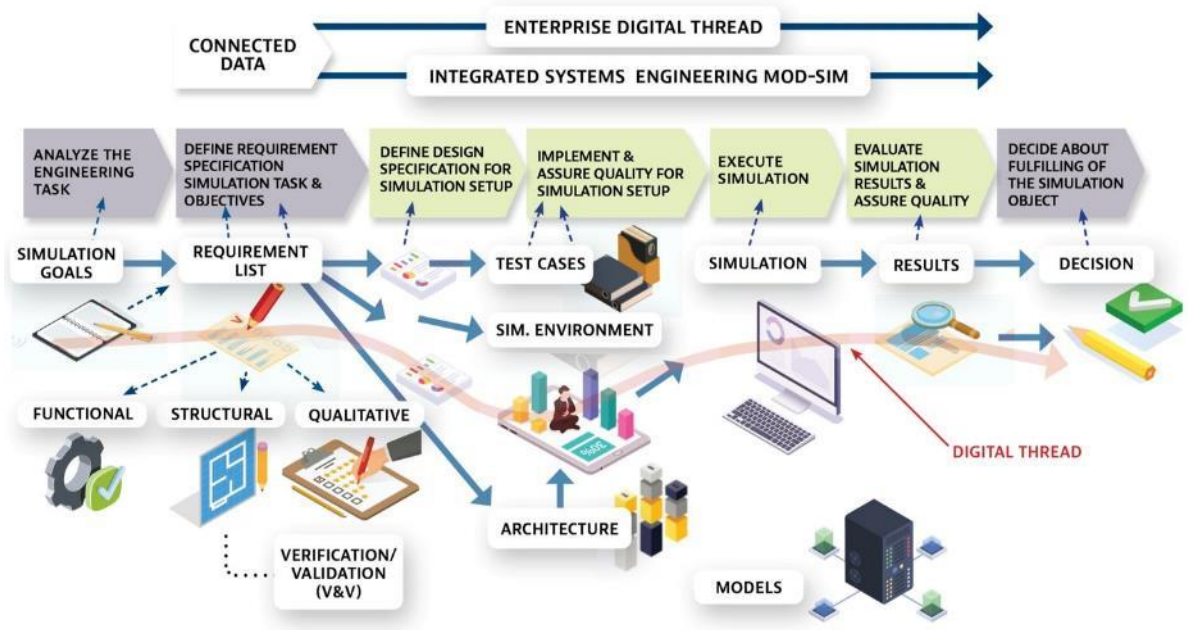
The future of systems engineering is predominantly Model-Based (MBSE)

FROM:

- The adoption of MBSE is uneven across industry sectors and within organizations.
- Custom, one-off simulations are used for each project, and there is still limited reuse of models especially during critical early phases of systems architecting and design validation.

TO:

- Systems engineers routinely compose task-specific virtual models using ontologically linked, digital twin-based model-assets.
- These connected models are updated in real-time providing a virtual reality-based, immersive design and exploration space. This virtual global collaboration space is cloud- based, enabled by modelling as a service and supports massive simulation leveraging cloud-based high-capacity compute infrastructure.
- Families of unified ModSim frameworks exist enabling small and medium businesses along with Government agencies to collaborate.



INCOSE Certification

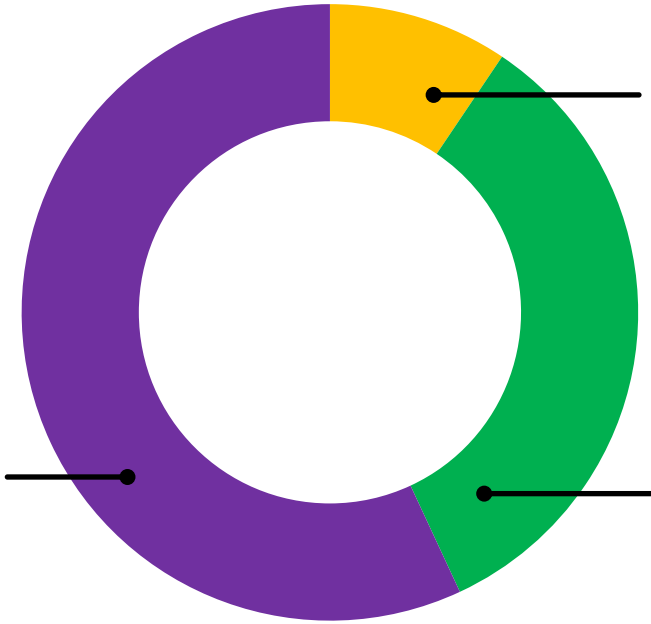
The Certification Program offers internationally recognized systems engineering qualification at three levels; confirming an individual's competency through demonstrated knowledge, education and experience.

- Systems Engineering Professional (SEP) certification formally recognizes an individual's progress through their career as they develop and apply systems engineering knowledge and practices.
- INCOSE offers three levels of certification ASEP, CSEP and ESEP.

4,033

Current Active Certifications

LEARN MORE: incose.org/certification



371

2,239

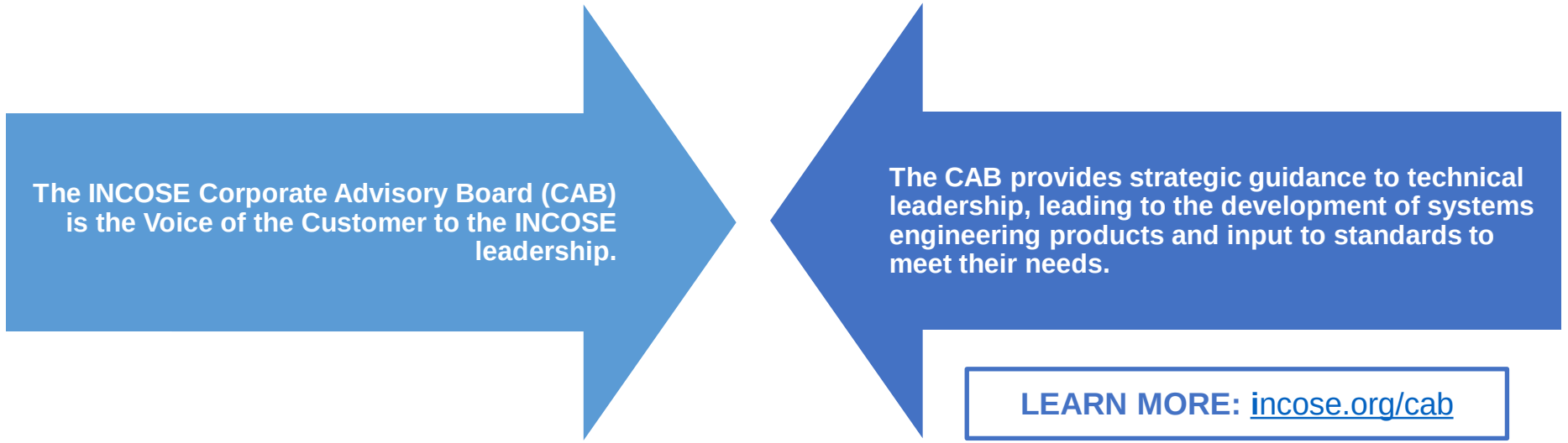
1,323

Stats from June 2022

Corporate Advisory Board

Corporate Advisory Board membership allows organizations to guide the direction of the discipline.

- Employees can gain access to the state-of-the-art products.
- Align with peers and fellow industry leaders, grow your global footprint, and learn about how other industry leaders are applying systems engineering to solve business problems.
- Gain better access to talent – find and hire competent, certified Systems Engineers through your INCOSE connection



LEARN MORE: incose.org/cab

Academic Council

A branch of the Corporate Advisory Board facilitating discussion and exploration of issues relevant to academia and strategic collaborations within INCOSE.

A well-educated workforce is key to Global Prosperity.

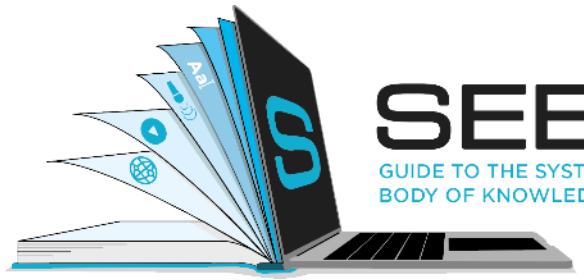
Council member organizations offer bachelors, masters, and doctorate degrees in systems engineering and related programs.

Active in advancing the state-of-the-art of systems engineering through academic programs.

LEARN MORE: incose.org/cab

Resources

PDP
PROFESSIONAL DEVELOPMENT PORTAL



SEBoK
GUIDE TO THE SYSTEMS ENGINEERING BODY OF KNOWLEDGE

INCOSE VIRTUAL COMMUNITY

INCOSE Systems Engineering HANDBOOK

SETDB
SYSTEMS ENGINEERING TOOLS DATABASE

Conferences and Events

International Symposium 2023

33rd Annual INCOSE international symposium
hybrid event
Honolulu, HI, USA
July 15 - 20, 2023

International Workshop 2023

2023 Annual INCOSE international workshop
HYBRID EVENT
Torrance, CA, USA
January 28 - 31, 2023

Human Systems Integration 2022

HSI2022 Human Systems Integration Workshop
INCOSE

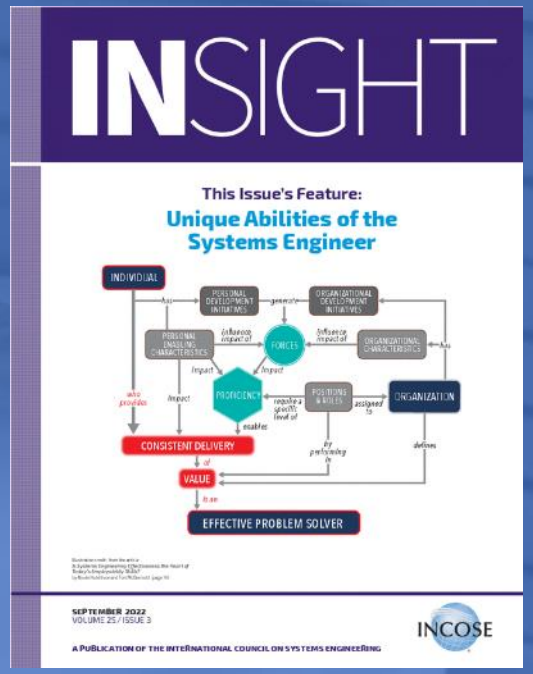
Europe, Middle East, Africa (EMEA) Workshop and Systems Engineering Conference (WSEC) 2023

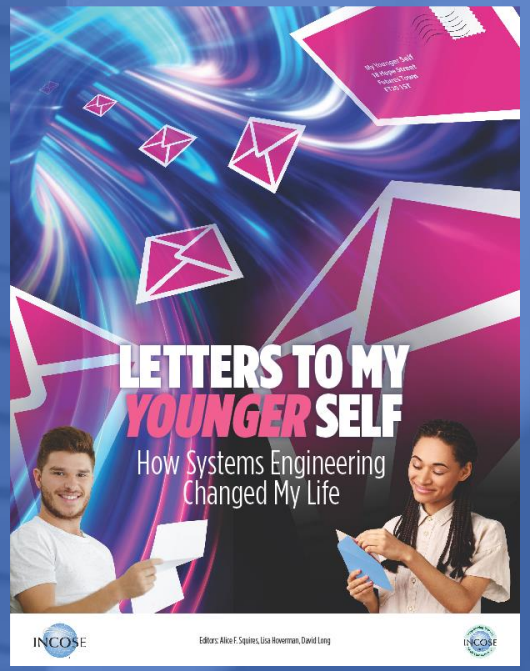
INCOSE
EMEA WSEC 2023
Europe, Middle East, Africa
Workshop and Conference
April 2023

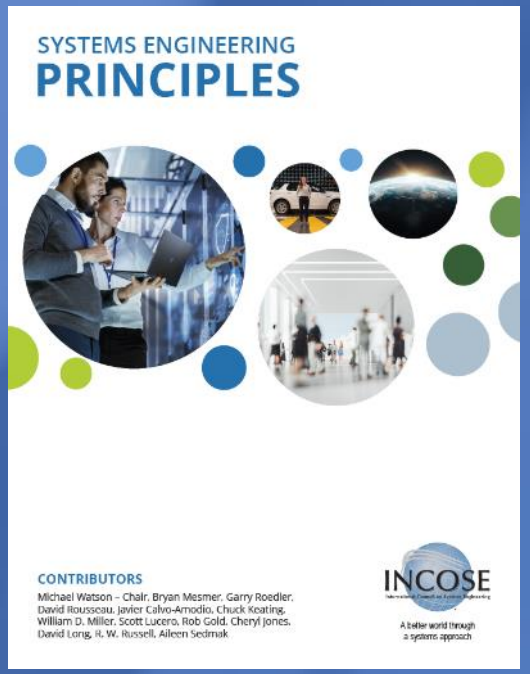
LEARN MORE:
incose.org/events-and-news

INCOSE

Publications







LEARN MORE:

http://connect.incose.org/store

INCOSE

The INCOSE Foundation

Committed to rewarding skills through scholarships for those engaged in finding solutions to complex technical challenges at all stages of their education or career.

Offers possibilities for people to pursue goals that anticipate the future – for them and for the world.

SCHOLARSHIPS INCLUDE:

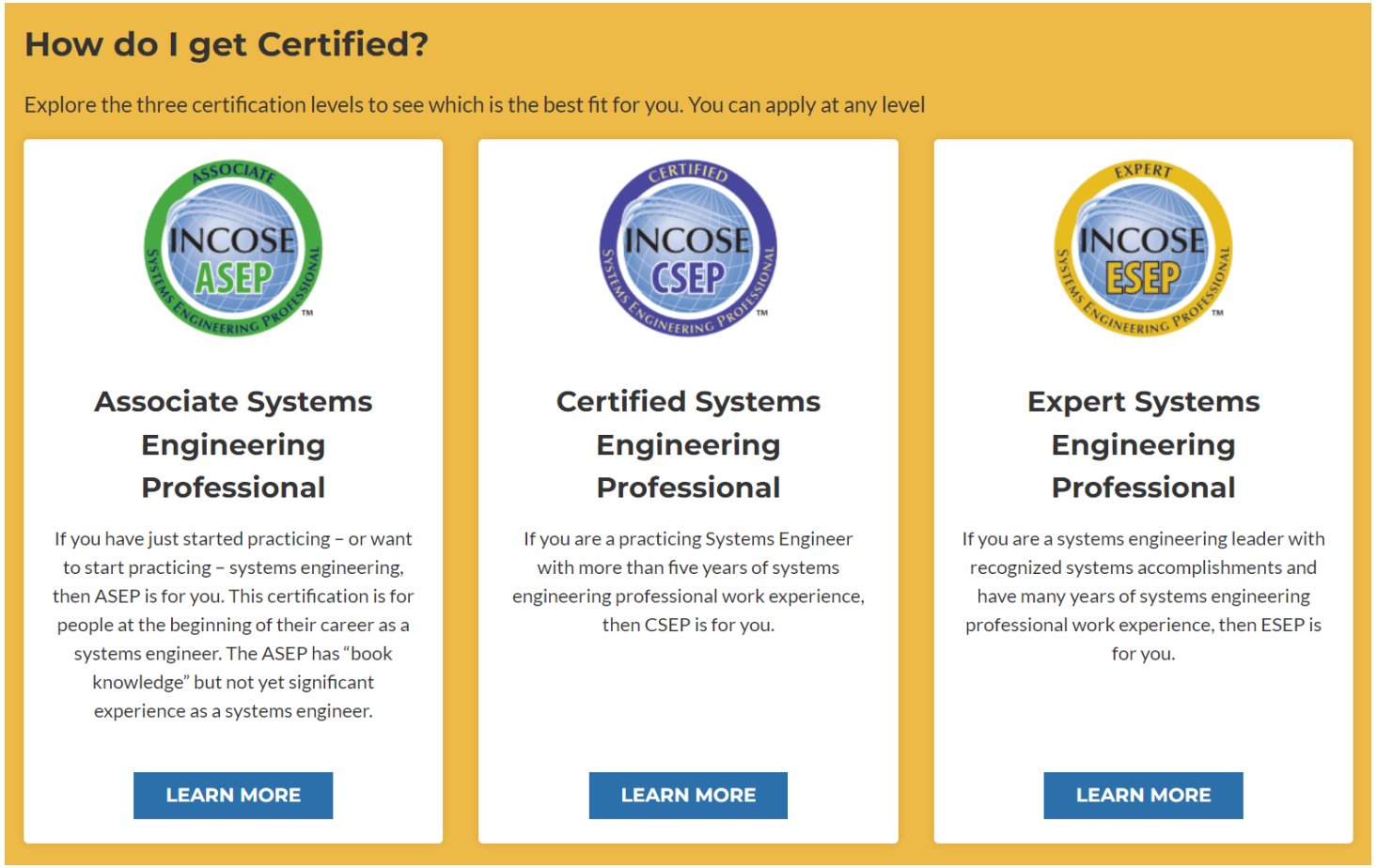
- ISEF, the International Science and Engineering Fair INCOSE Award to a pre-college student
- The Chesapeake Chapter Award
- The Stevens Doctoral Award for Promising Research in Systems Engineering to a PhD Candidate
- The James E. Long Award for Post Doctoral work

FEATURED PRESENTATION:
Certification and your Career

Courtney Wright

INCOSE Certification

Program Director



Welcome Center Feedback

We want YOUR Feedback on today's Welcome Center event

- What did you **like** about this Welcome Center event today?
- What can be **improved** for future Welcome Center events?
- How else do you want to be **supported** to become more involved within INCOSE?

Contact us with any questions about INCOSE: nme@incose.net

Questions?