



# The International Council on Systems Engineering

“Systems Engineering Professional Certification”

Welcome Center Event 3 (2022 February)

Presented By New Member Engagement Team (NMET) (Email:[nme@incose.net](mailto:nme@incose.net))



# About New Member Welcome Center

- The Welcome Center is a social and virtual forum for INCOSE New Members
- Welcome Center cafes aim to onboard, orient and communicate with new members in their initial INCOSE journey
- Welcome Center New Member Yammer community is an online platform that can be used dynamically by members to connect and engage with other Members and locate INCOSE information

## New Member Guides

- Senior/Experienced INCOSE members connect and engage with new members via Welcome Center Café events, online collaboration (Yammer) and informal communication avenues (email, MS Teams chat etc.)

New Member Welcome Center Café Event	Date and Registration Link
Wednesday, 4:00pm Japan Time (11:00 pm US Pacific)	23-February-2022 <a href="#">Register</a>
Thursday, 8:00am US Pacific Time	24-February-2022 <a href="#">Register</a>
Monday, 6:00pm London Time (10:00 am US Pacific)	28-February-2022 <a href="#">Register</a>



# Purpose and Agenda

## Agenda

- Welcome/Introduction
- INCOSE Overview
- Certification Guest Speaker
  - Courtney Wright, Program Director, Certification
  - Certification Q&A
- Guide/Attendee Breakout Groups (25 minutes)
- Conclusion/Welcome Center event feedback (5 minutes)



# Vision, Mission & Goals

- Vision
  - A better world through a systems approach.
- Mission
  - To address complex societal and technical challenges by enabling, promoting, and advancing Systems Engineering (SE) and systems approaches.
- Goals
  - Be a focal point for dissemination of systems engineering knowledge
  - Promote international collaboration
  - Assure the establishment of professional standards in systems engineering
  - Improve the professional status of all Systems Engineers
  - Encourage governmental and industrial support for System Engineering
- Visit <https://www.incose.org/about-incose> to view the vision, mission and goals



# INCOSE Reach



**18000+**  
MEMBERS



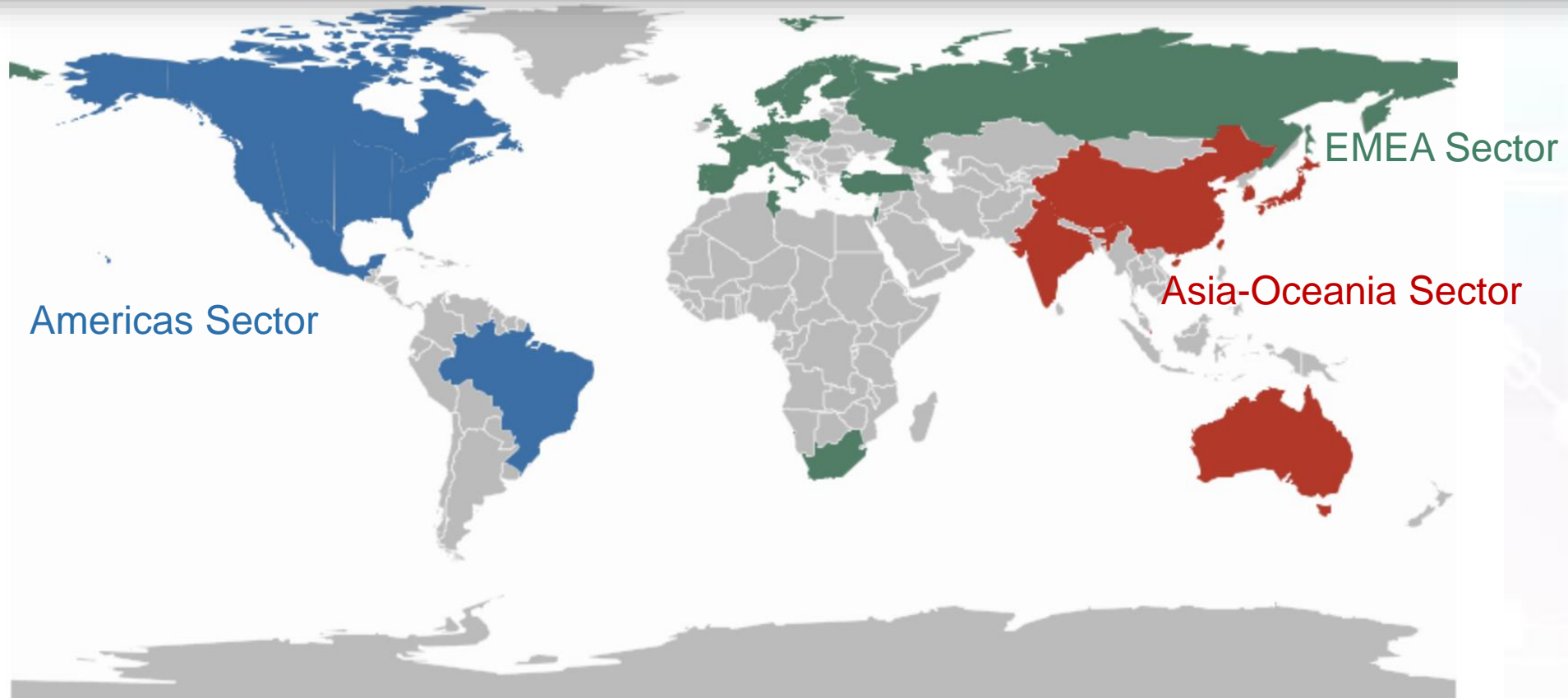
**74+**  
CHAPTERS



**55**  
WORKING GROUPS



**3182**  
CERTIFIED





# Why INCOSE?

## Professional Development

Increase your technical knowledge through INCOSE webinars, publications, papers and your chapter tutorials

Improve your knowledge and skills

## Professional Networking

Connect and engage with your SE peers various INCOSE, sector and chapter events to expand your professional network

Create friendships

## Professional Prominence

Advance your visibility and impact by becoming involved in developing, publishing, and presenting on SE topics

Share your technical knowledge and ideas with the community and across professional organizations

## Working Groups

Join a working group to help lead, guide and advance technical knowledge

## Chapter Involvement

Become involved in your local chapter STEM programs to support the upcoming generation of SE's

## Certification

Become a certified to advance your recognition in SE

## Leadership

Grow, advance and leave an impact by becoming an INCOSE volunteer

# Welcome Center Poll

We want YOUR Feedback on today's Welcome Center event (e.g., chat poll)

1. What did you like about this January Welcome Center event focused on the International Workshop?
2. What can be improved for future Welcome Center events?
3. How else do you want to be supported to become more involved within INCOSE?

Contact Us @ [nme@incose.net](mailto:nme@incose.net)

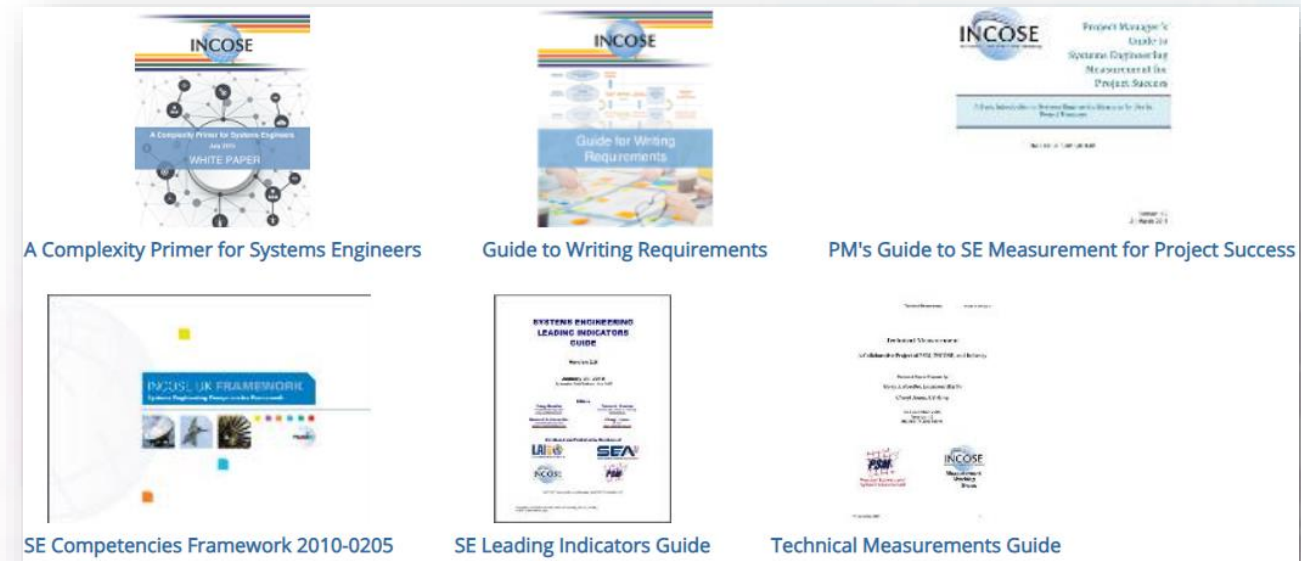
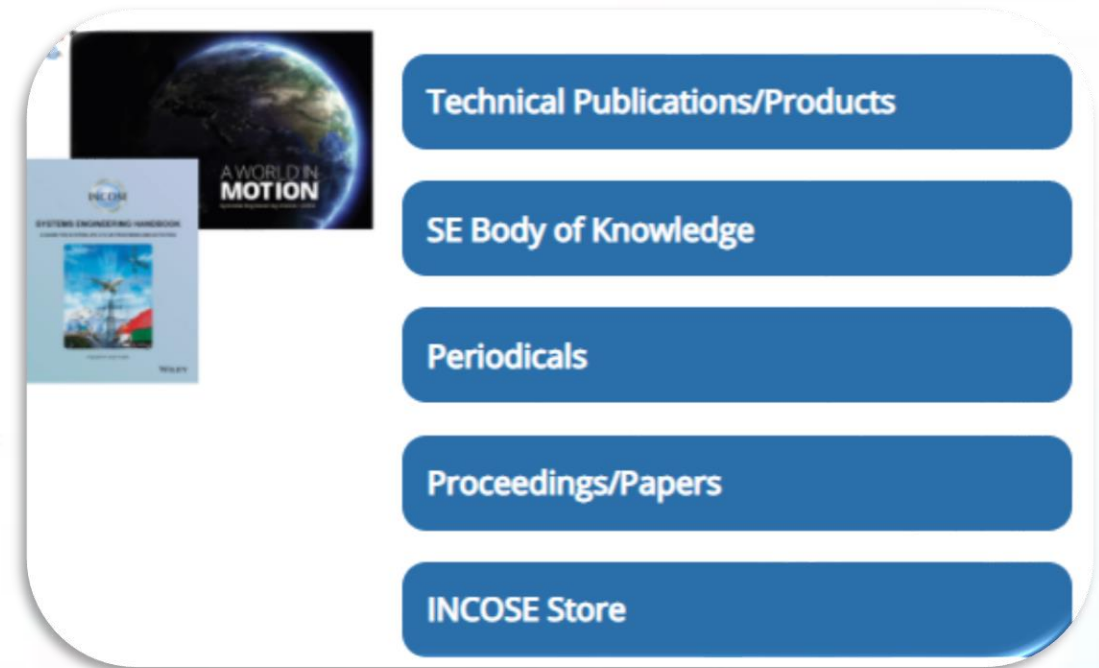
New Member Welcome Center Event





# INCOSE Products

- Technical Publications/Products
  - Members have access to free soft copy downloads - <https://www.incose.org/products-and-publications/technical-publications>
  - Access to SE Journal, INSIGHT Magazine and INCOSE Newsletter
- SE Body of Knowledge (SEBOK)
  - <https://www.sebokwiki.org>
- Periodicals
  - <https://www.incose.org/products-and-publications/periodicals>
- Proceedings/Papers
  - <https://www.incose.org/products-and-publications/papers-presentations-library>
- INCOSE Store
  - Purchase and order INCOSE products via <https://connect.incose.org/pages/store.aspx>

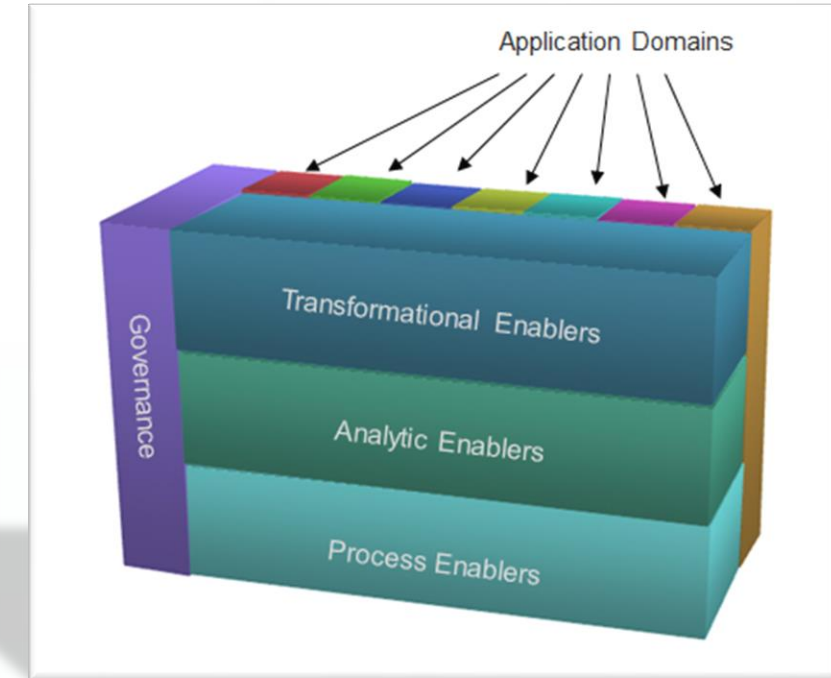






# Working Groups

- Working Groups (WGs) are the resource practitioners need.
- Participants discuss, collaborate, share in person, and online across more than 60 WGs in INCOSE with a wide diversity of interests.
- INCOSE WG members create products, present panels, develop and review standards.
- View the INCOSE Working Groups - [www.incose.org/workinggroups](http://www.incose.org/workinggroups)





# Working Group Members

- Bring value to other INCOSE stakeholders in your interest area
- Build expertise and contacts
- Help develop and review international standards
- Create products to advance the state, art and practice of Systems Engineering.
- How to Join a Working Group (found on the working group page)
  - Membership in Working Groups is open to any INCOSE member. To join a group:
  - <http://profile.incose.org>
  - Scroll to the bottom left section titled "My Committees and Working Groups"
  - Click the link for "Browse / Join a Working Group"
  - Find the desired Working Group and click on View to see roster; the Join option is at the bottom of the page
  - Additionally, email the Working Group leaders by clicking on their name(s) from the Working Groups page and sending them an email expressing your interest!

<b>Resilient Systems</b> Ken Cureton / John Birds Analytic Enablers	<b>Risk Management</b> Bob Parro / Jack Stein Process Enablers	<b>SE in Early Stage Research &amp; Development</b> A. Hodges / N. Lombardo / H. Hahn / M. Transformational	<b>SE Tools Database</b> John Nallon Transformational	<b>Small Business Systems Engineering</b> Angela Robinson / Claude Laporte / Ken Pack / Transformational
<b>Smart Cities Initiative</b> Jennifer Russel Initiative	<b>Social Systems</b> Erika Palmer Analytic Enablers	<b>Soft Skills</b> Sean McCoy / J. Wojcik / C. Whitcomb Transformational	<b>Space Systems</b> David Kaslow Application Domains	<b>System of Systems</b> Alan Harding Analytic Enablers
<b>System Safety</b> Duncan Kemp / Meaghan O'Neill / Russell Kubycheck Analytic Enablers	<b>Systems and Software Interface</b> Nick Guertin Transformational	<b>Systems Engineering Quality Management (SEQM)</b> Barclay Brown Process Enablers	<b>Systems Science</b> Javier Calvo Transformational	<b>Systems Security Engineering</b> Rick Dove Analytic Enablers
<b>Telecommunications</b> John Risson Application Domains	<b>Tools Integration &amp; Model Lifecycle Management</b> John Nallon Transformational	<b>Training</b> Gabriela Coe / John Clark Analytic Enablers	<b>Transportation</b> Dale Brown / Denis Simpson / Allison Ruggiero Application Domains	<b>Value Proposition Initiative</b> Juan Amenabar / Ken Harmon

**How to Join a Working Group**

Membership in Working Groups is open to any INCOSE member. To join a group:

- Log into your INCOSE account
- Go to your Profile Page, and scroll to the bottom left section titled "My Committees and Working Groups"
- Click the link for "Browse / Join a Working Group"
- Find the desired Working Group and click on View to see roster; the Join option is at the bottom of the page
- Additionally, email the Working Group leaders by clicking on their name(s) from the Working Groups page and sending them an email expressing your interest!

<https://www.incose.org/incose-member-resources/working-groups>



# Chapters & Groups



**74**

CHAPTERS



**35**

COUNTRIES



**55**

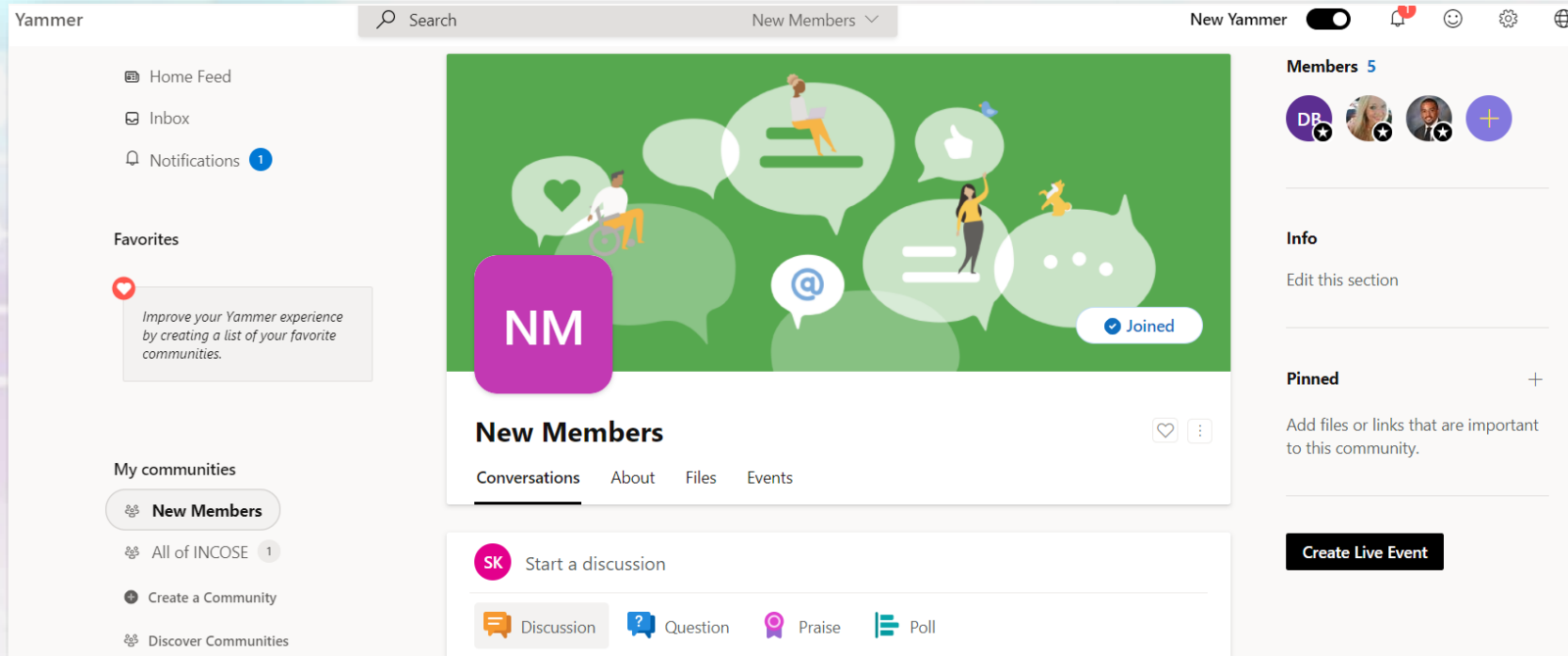
WORKING GROUPS

- At the heart of INCOSE is the ability to connect people.
- Whether you are interested in increasing your circle of influence, or in working on an issue, INCOSE Chapters and Working Groups offer unparalleled points of connection.
- Search for an INCOSE chapter - [www.incose.org/chapters](http://www.incose.org/chapters)



# 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](http://www.yammer.com) and login with your @incose.buzz account when assigned





# INCOSE Web Site – [www.incose.org](http://www.incose.org)

- The INCOSE website IS the way to access the latest information and resources
- Visit [www.incose.org](http://www.incose.org) to log into your INCOSE account, access your profile, assign your INCOSE chapter, access publications and so much more!

Purchase and download INCOSE publications

Use your login ID and password to access the intranet

The screenshot shows the INCOSE website homepage. At the top, there is a navigation bar with links for "Collaboration Portal 'Connect'", "Store", and "Contact us". On the right, there is a search bar labeled "New! Search", a "Join us" button, and a "Login" button. The main content area features six large tiles with images and text:

- WHAT IS SYSTEMS ENGINEERING?** Learn about this impactful field. (Image: A person holding a glowing lightbulb with circuit lines.)
- INCLOSE'S IMPACT** Leading the future of Systems Engineering. (Image: A globe with circuit lines.)
- GROW IN SYSTEMS ENGINEERING** Shape the world and advance your career. (Image: A hand holding a ladder against a blue sky.)
- STAY CONNECTED** INCOSE news and events. (Image: A busy exhibition hall.)
- FROM THE CUTTING EDGE** Impactful products and state-of-the-art research. (Image: A hand pointing at a futuristic interface with labels like CONCEPT, SUCCESS, STRATEGY, CREATIVE, PLANNING, ANALYSIS, and INNOVATION.)
- FIND YOUR COMMUNITY** Get involved with INCOSE near you. (Image: Silhouettes of people sitting around a table with a world map in the background.)

At the bottom, there is a footer with the text "INCOSE virtual Events and Resources" and a "New to INCOSE?" button. A banner at the very bottom states: "Like all organizations, INCOSE is monitoring the COVID-19 situation throughout the world and adapting to".

Callouts from the left side of the slide point to specific features on the website:

- A callout points to the "Store" link, stating: "Purchase and download INCOSE publications".
- A callout points to the "Collaboration Portal 'Connect'" link, stating: "To collaborate with working groups and teams go through the Portal".
- A callout points to the "Login" button, stating: "Use your login ID and password to access the intranet".
- A callout points to the "New to INCOSE?" button, stating: "Locate New Member information".





# Corporate Advisory Board

- The INCOSE Corporate Advisory Board (CAB) is the voice of the industry to the INCOSE leadership, leading to the development of systems engineering products and input to standards to meet their needs.
- Learn more about the CAB and access application forms at [www.incose.org/cab](http://www.incose.org/cab)
- Why should a **company** join the INCOSE CAB?
  - CAB membership allows your organization 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.





# INCOSE Events

- INCOSE conferences events and news information is located at [www.incose.org/events](http://www.incose.org/events)
- At this site, you will find a listing of upcoming informational sessions, a link to the annual International Working Group (IW) and the International Symposium (IS) conferences.

## INCOSE Events

INCOSE keeps you connected with news from the field and a variety of ways to meet and network with the largest global systems engineering community throughout the year.



**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022



**32<sup>nd</sup>** Annual **INCOSE**  
international symposium  
**hybrid event**  
Detroit, MI, USA  
June 25 - 30, 2022

If you are looking for a regional event, search on our database.

## Upcoming Events

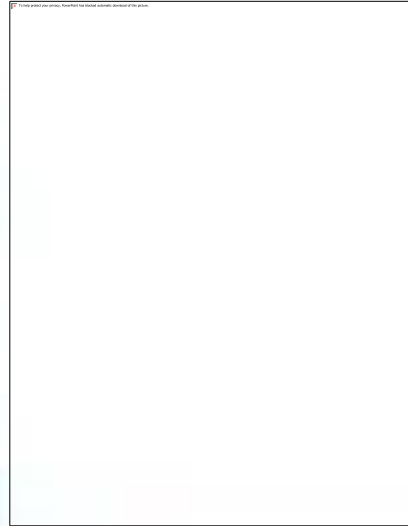
Feb 2022	INCOSE San Diego Chapter: Virtual presentation on INCOSE Professional Certification Program Feb 23, 2022 - Feb 23, 2022
Feb 2022	INCOSE/GfSE Webinar 3: Model-based Systems Engineering Demystified (Part II) Feb 24, 2022 - Feb 24, 2022
Mar 2022	INCOSE-LA Chapter Speaker Meeting: Future-Proofing Systems Engineering Skills Mar 01, 2022 - Mar 01, 2022  <a href="http://events.r20.constantcontact.com/register/event?oeidk=a07ej1l3x5hedc00e8f&amp;llr=l4ihvgeab">http://events.r20.constantcontact.com/register/event?oeidk=a07ej1l3x5hedc00e8f&amp;llr=l4ihvgeab</a>

## News Highlights

- Joint INCOSE-ASME Standards Development Effort  
Feb 14, 2022
- Latest Issue of the Journal Systems Engineering Published  
Jan 11, 2022
- SysML Special Issue of Systems Engineering Journal Published  
Jan 06, 2022
- ABET Approves the Systems Engineering Program Criteria  
Dec 27, 2021
- Featured Papers of 2020 Special Issue of Systems Engineering Journal Published  
Dec 16, 2021

# About SEP Certifications

Primary information source



# Guest Speaker

Courtney Wright is a CSEP and the INCOSE Certification Program Manager. She handles the INCOSE Certification Program's external interfaces and marketing and ensures compliance to internal policies. Courtney works with individuals and large organizations to support their professional development activities. Her experience includes modeling and simulation for the USAF, specialty engineering for the National Reconnaissance Office (NRO), requirements engineering for the National Geospatial-Intelligence Agency (NGA), architecture and design development for the National Aeronautics and Space Administration (NASA), and systems engineering training development and delivery for the Federal Aviation Administration (FAA).



# INCOSE Systems Engineering Professional (SEP) Certification Program

Program Summary  
July 2021



# INCOSE SEP Architecture

*For wherever you are in your career*

## Multi-Level Base Credentials

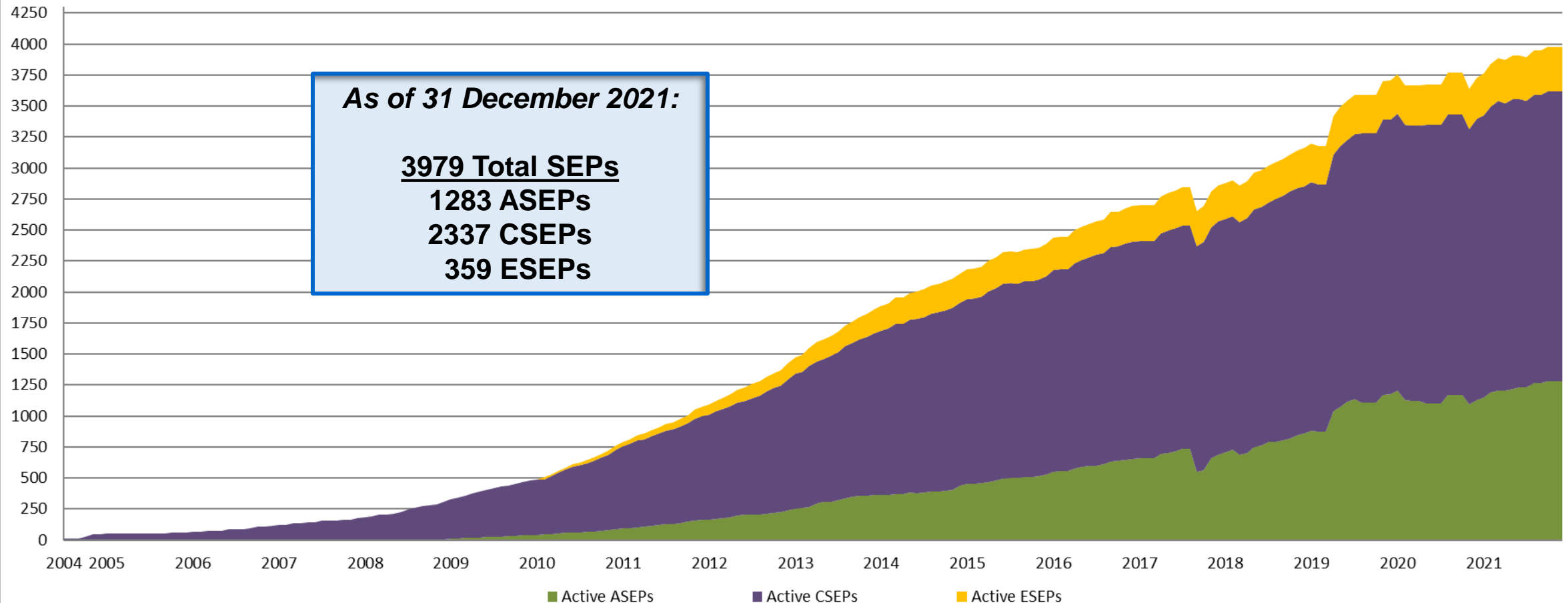
*The base ASEP, CSEP, and ESEP credentials cover the breadth of systems engineering at increasing levels of leadership, accomplishments, and experience.*





# Total SEPs since 2004

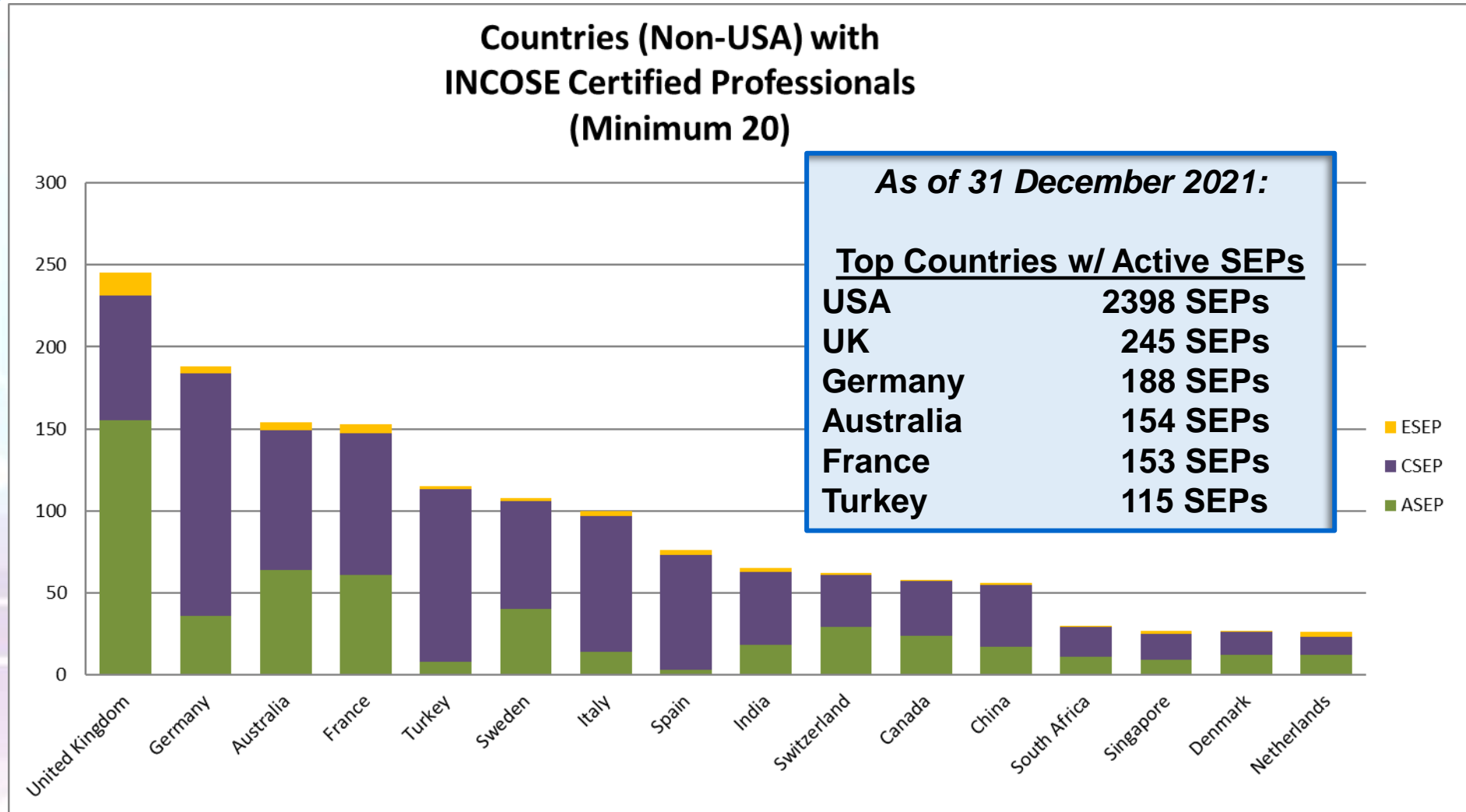
## INCOSE Systems Engineering Professionals





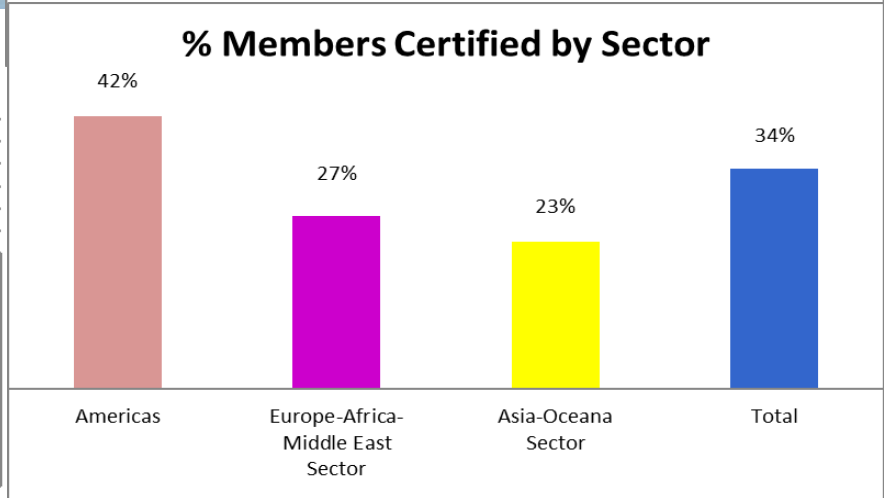
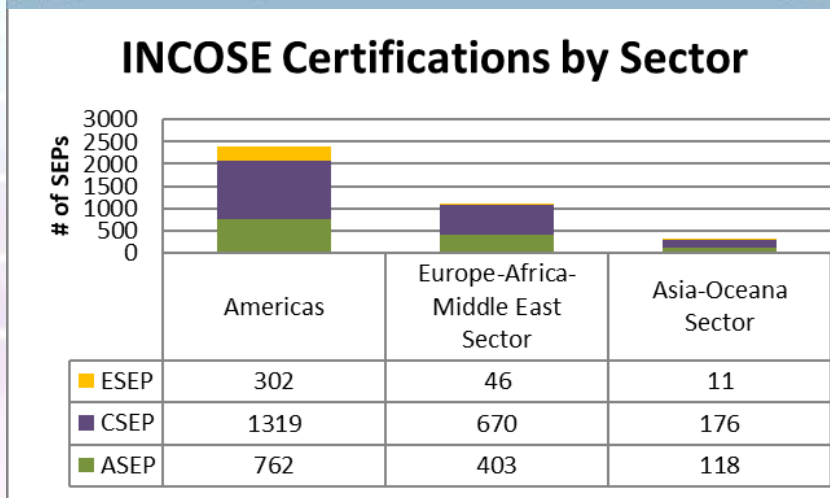
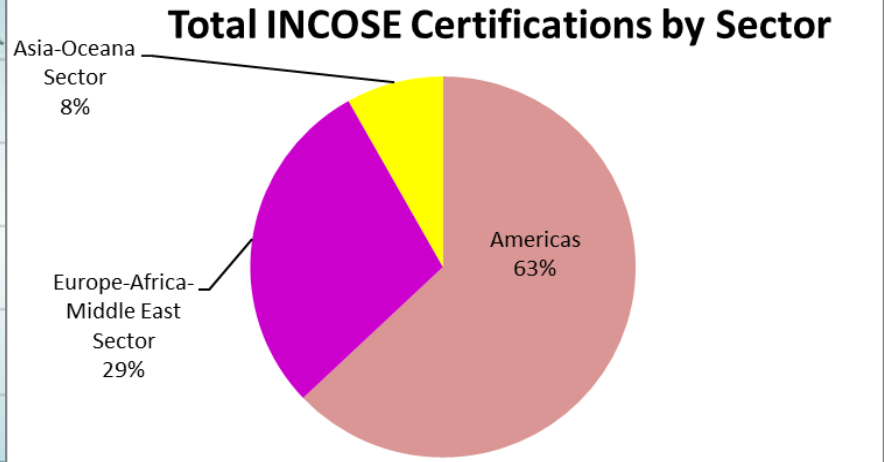


# SEPs by Country



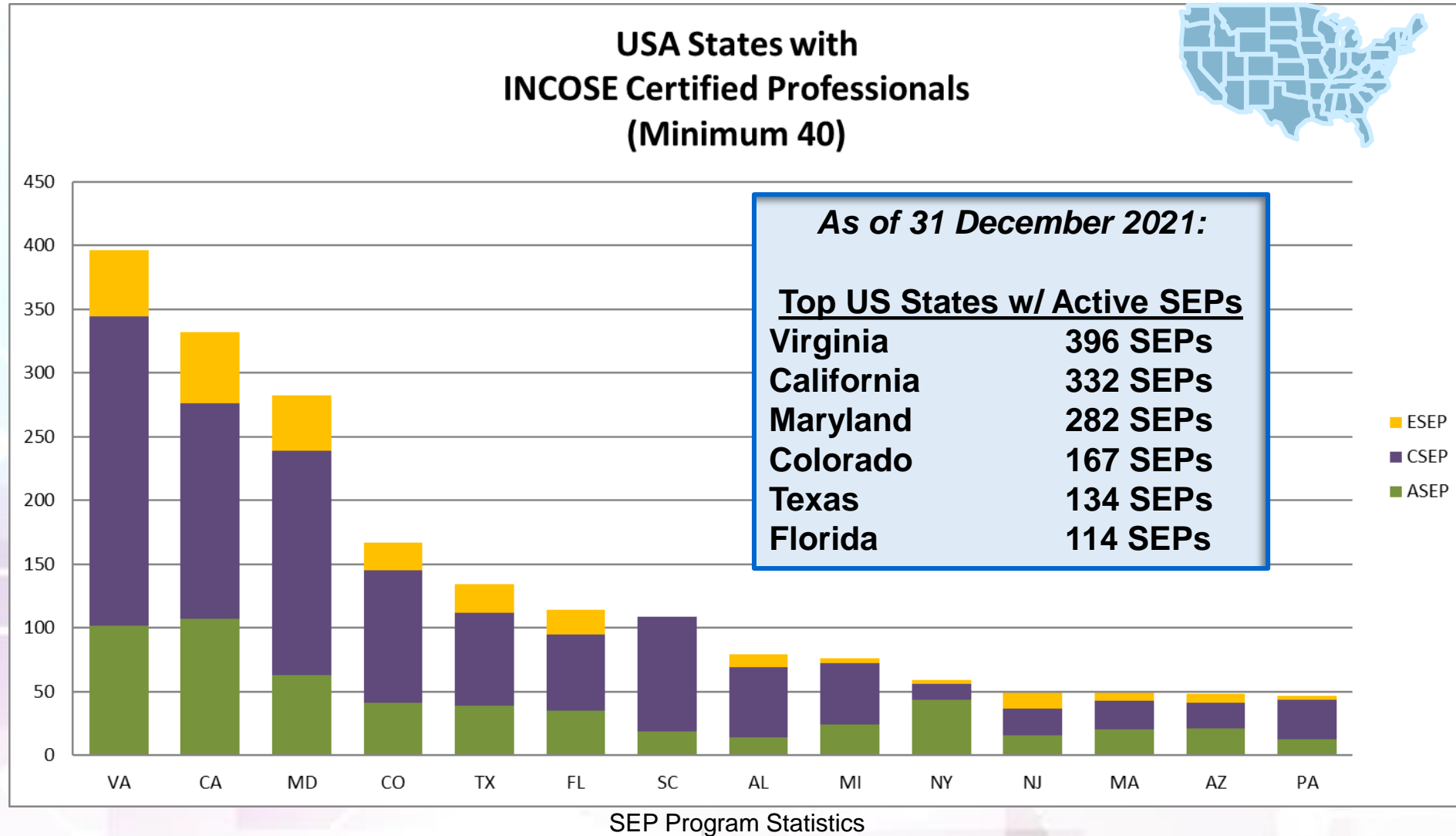


# SEPs by Sector





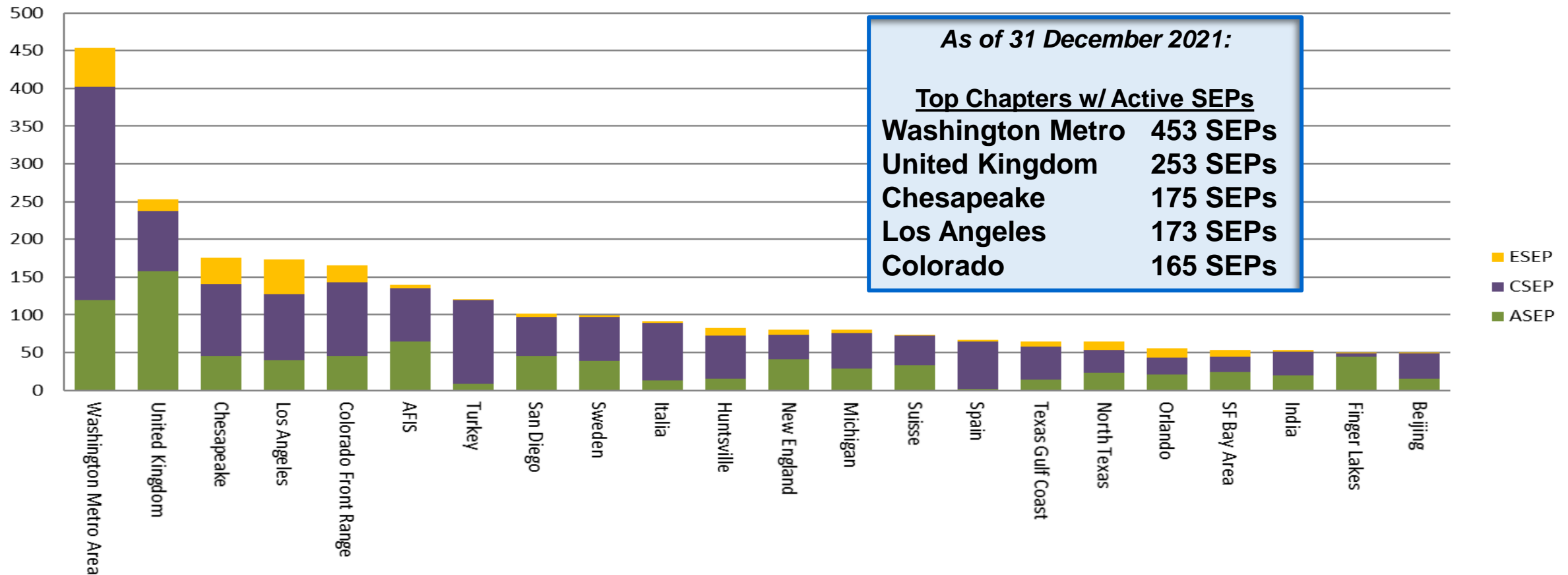
# SEPs by US State





# SEPs by Chapter

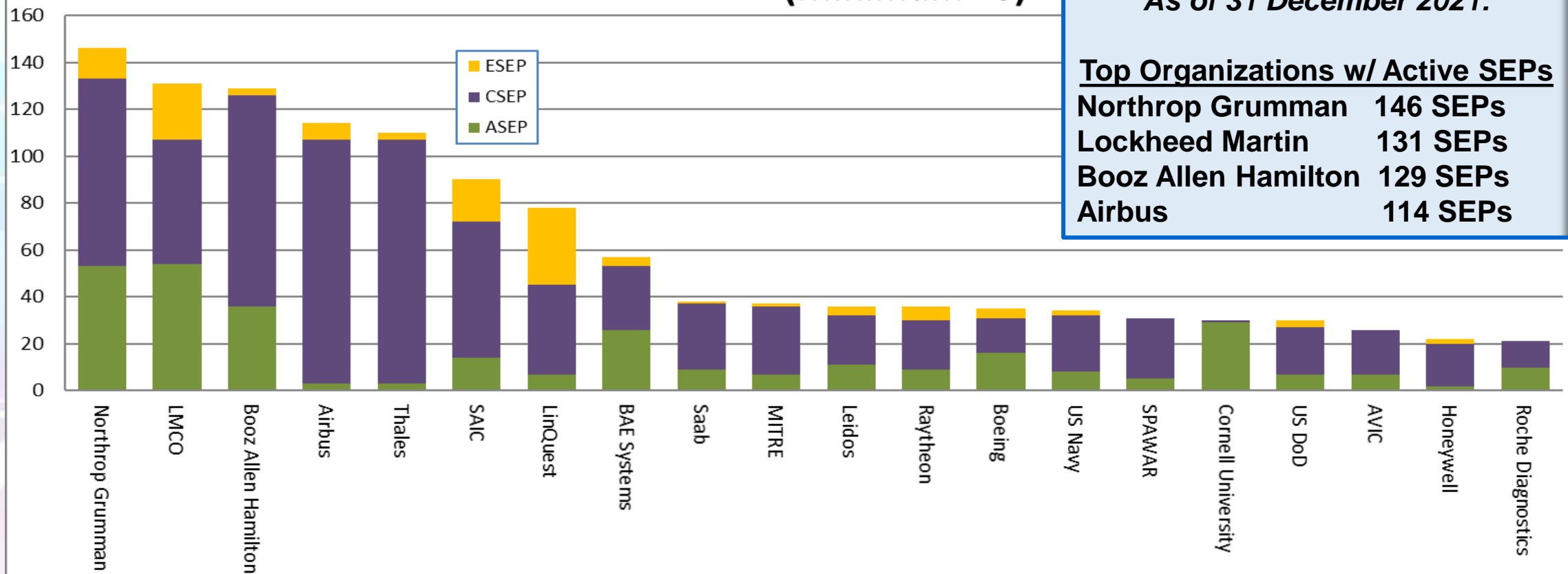
## Certifications by Chapter (Minimum 50)





# SEPs by Organization

**Certifications by Organizations  
(Minimum 20)**





# Job Postings ask for SEP

- Aspiration Software
- Barrios
- Belcan Government Services
- Booz Allen Hamilton
- Central Intelligence Agency
- ClearMotion
- DRS Technologies
- Engility
- Georgia Tech Research Institute
- IDEMIA
- INNOVIM
- JB Management
- KBRWyle
- Leidos
- Lockheed Martin
- Logistics Management Institute
- The Mitre Corporation
- National Geospatial-Intelligence Agency
- Newbrook
- Noblis
- Northrop Grumman Corporation
- Oceaneering
- OG Systems
- Raytheon
- SAIC
- Sanmina Corporation
- Vencore





# Certification Agreements: Industry

- The Airbus Group
- ASTER Technology & Engineering
- AVICIT
- BAE Systems
- Booz Allen Hamilton
- Cummins
- Jacobs Technology
- KBR Wyle
- L-3 Communications
- LinQuest
- Lockheed Martin
- ManTech
- MITRE
- OPS Consulting
- Perspecta
- Raytheon
- Roche
- SAIC
- Thales



# Certification Agreements: University

- Streamlined Process

- École Polytechnique
- ISAE/Supaero
- University of New South Wales
- University of Texas – El Paso
- Worcester Polytechnic Institute

- Academic Equivalency

- Colorado State University
- Cornell University
- Drexel University
- Missouri S&T
- Naval Postgraduate School
- University of Alabama – Huntsville
- University of Detroit – Mercy
- University of Maryland – Baltimore County
- University of Michigan
- University of New South Wales
- Worcester Polytechnic Institute

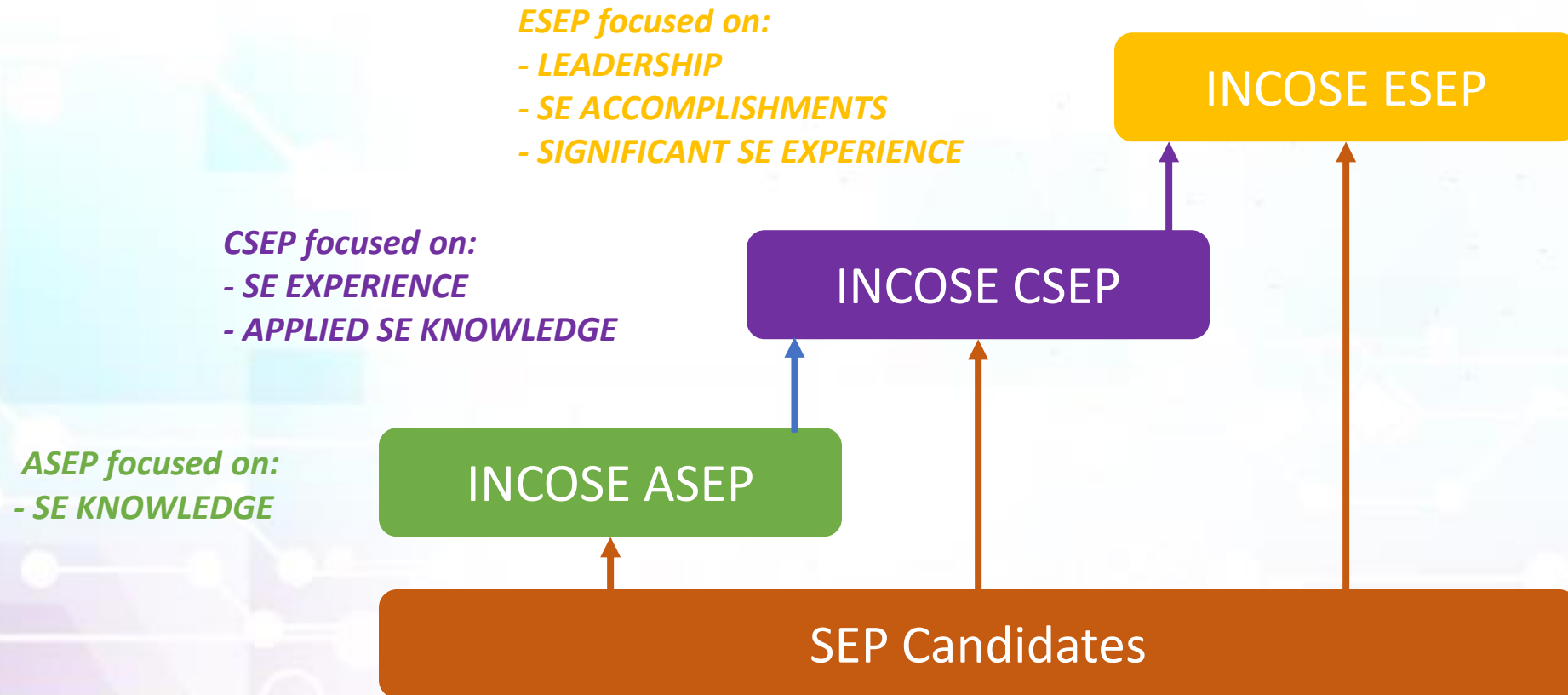


# Certification Agreements: Other

- Object Management Group (OMG) OCSMP
- GfSE (Germany)
- SESA (Australia)
- INCOSE UK Chapter
- US Defense Acquisition University (DAU)



# SEP Describes Career Path

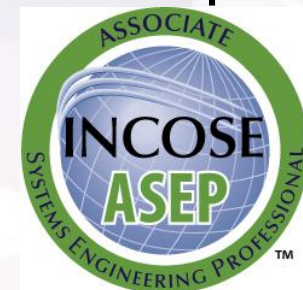


**You can enter at whatever SEP level is appropriate and can seamlessly transition between levels when ready.**



# Knowledge Level: Associate Systems Engineering Professional

- Targeted towards junior/maturing systems engineers and recent college graduates with limited systems engineering work experience
- ASEPs are certified against knowledge requirements
- Knowledge confirmed through an exam based on the INCOSE SE Handbook
- ASEPs must be, and remain, INCOSE members
- Renewal every 5 years through ongoing professional development, maximum duration of 15 years
- Available since 2008





# Foundation Level: Certified Systems Engineering Professional

- Targeted towards systems engineers with five or more years of systems engineering work experience
- CSEPs are certified against substantiated experience, education, and knowledge requirements
- Experience must be substantiated by 3-5 work-related references
- Knowledge confirmed through an exam based on the INCOSE SE Handbook
- CSEPs must be, and remain, INCOSE members
  - Does not apply to those who applied in 2015 or earlier
- Renewal every 3 years through ongoing professional development
- Available since 2004

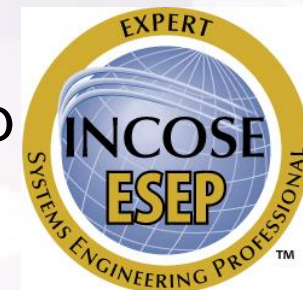






# Senior Level: Expert Systems Engineering Professional

- Targeted towards senior systems engineering leaders with recognized systems accomplishments, who have many years of systems engineering work experience
- ESEPs are certified against substantiated professional leadership, systems engineering accomplishments, experience, and education requirements
- At least 10 years of experience must be substantiated by 3-5 work-related references
- Interviews used to validate leadership and significant systems accomplishments
- ESEPs must be, and remain, INCOSE members
- No renewal requirements other than INCOSE membership
- Available since 2010





# What Certification is Right for You?

- If you have just started (or plan to start) practicing systems engineering or have recently graduated and are interested in systems engineering
- If you are a practicing Systems Engineer with more than five years of systems engineering professional work experience
- If you are a systems engineering leader with recognized systems accomplishments and have many years of systems engineering professional work experience





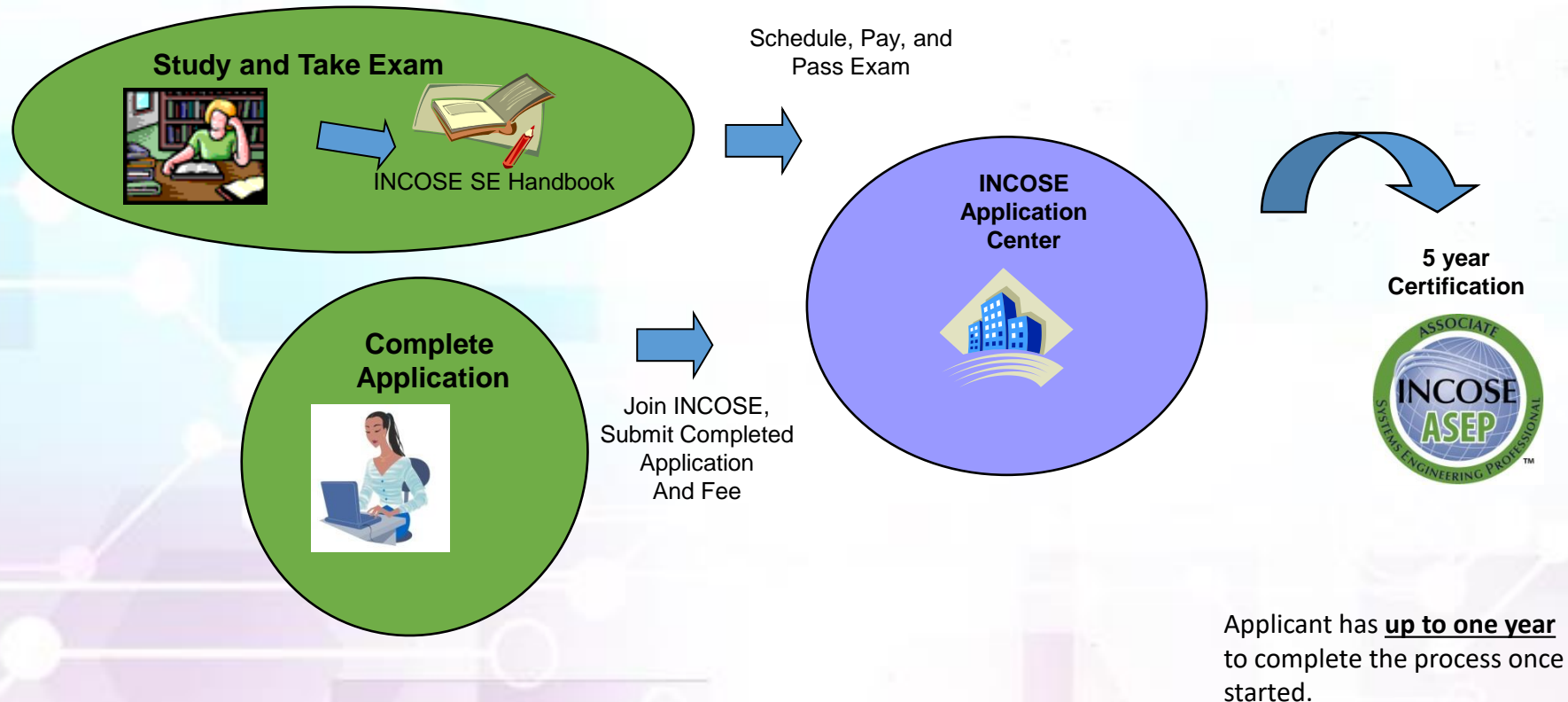
# Topics

- What is INCOSE?
- Who is recognizing and supporting INCOSE certification?
- What are the levels of certification?
- ➔ • What is the application process for certification?
- How is certification renewed?



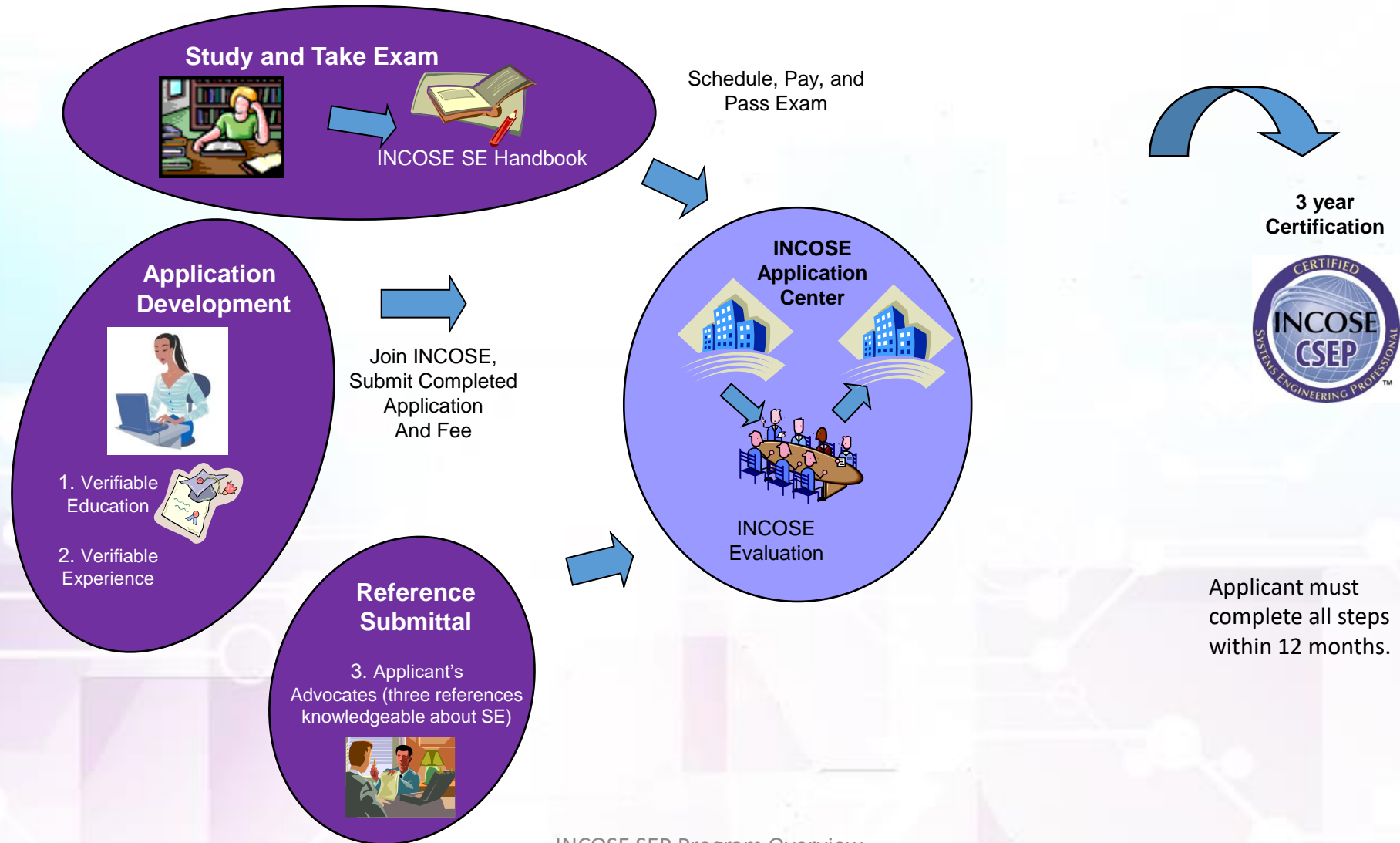


# ASEP Application Process



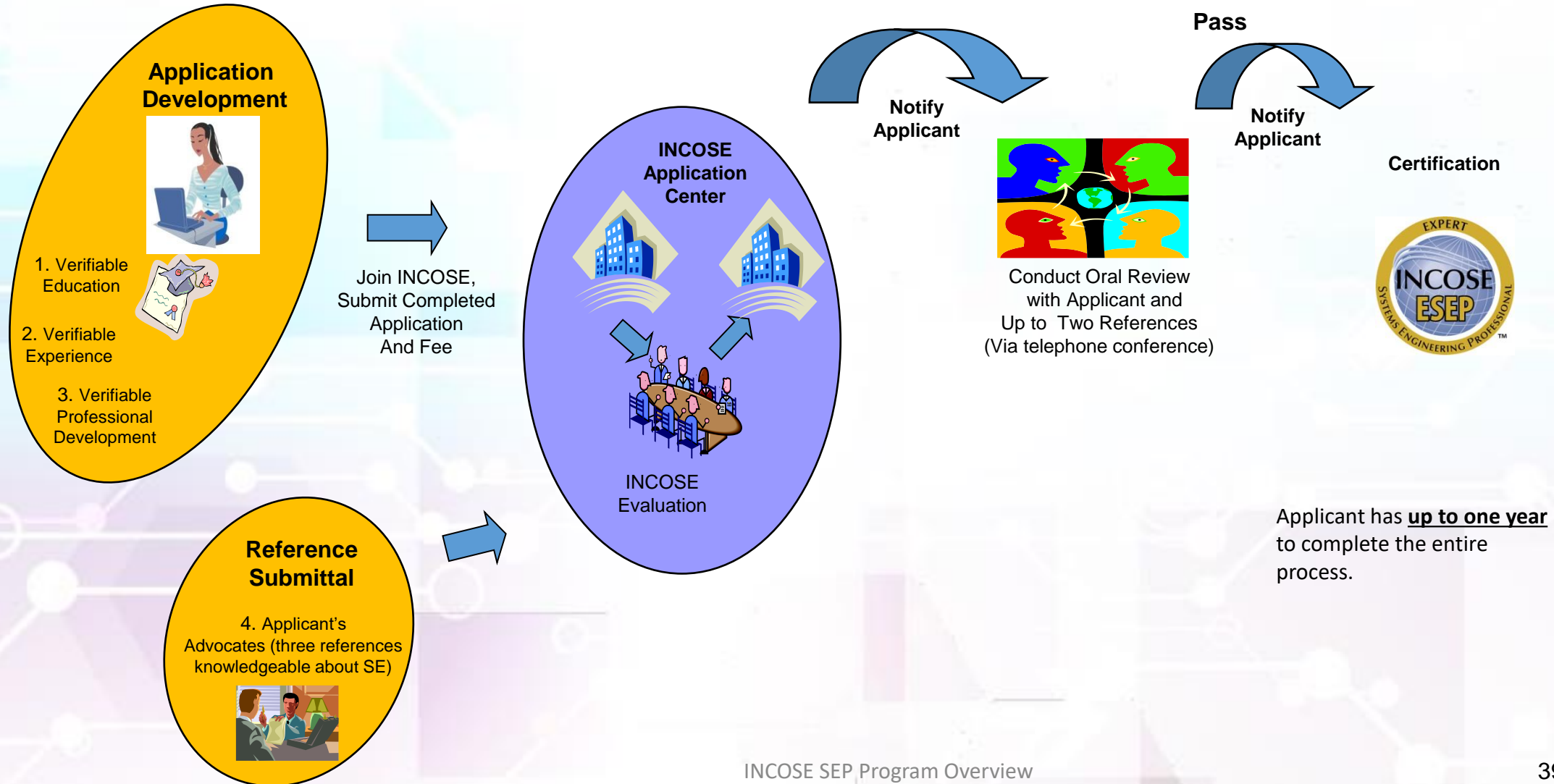


# CSEP Application Process





# ESEP Application Process







# Knowledge verified by exam

- CSEP/ASEP Exam Basis
  - INCOSE Systems Engineering Handbook v4
- Exam is
  - 100 or 120 questions, 100 or 120 minutes long
  - Administered online with video proctoring
  - Offered as a pencil-and-paper test at many INCOSE events
- Candidates are eligible for three attempts within one year



# Education verified by diploma

- Education
  - Qualifying Bachelor's Degree (or international equivalent)
    - Acceptable engineering fields of study include: aeronautics, biomedical, chemical, civil, computer, electrical, environmental, industrial, mechanical, nuclear, software, systems
    - Other acceptable fields of study include: chemistry, computer science, mathematics, physics
    - If the Bachelor's degree does not come from the above fields, then a Masters or Doctorate degree (or international equivalent) in those fields is acceptable
    - INCOSE is the final authority on degree applicability
  - Additional Experience Can be Substituted
    - Minimum of 5 additional years of general engineering experience for non-technical Bachelor's degree
      - Minimum of 10 years (with at least 5 in SE) for CSEP
      - Minimum of 25 years (with at least 20 in SE) for ESEP w/ CSEP
      - Minimum of 30 years (with at least 25 in SE) for ESEP w/o CSEP
    - Minimum of 10 additional years of general engineering experience if no Bachelor's degree
      - Minimum of 15 years (with at least 5 in SE) for CSEP
      - Minimum of 30 years (with at least 20 in SE) for ESEP w/ CSEP
      - Minimum of 35 years (with at least 25 in SE) for ESEP w/o CSEP



# Experience documented across specific areas

- Requirements Engineering
- System and Decision Analysis
- Architecture / Design Development
- System Integration
- Verification and Validation
- System Operation and Maintenance
- Technical Planning
- Technical Monitoring and Control
- Acquisition and Supply
- Information Management and Configuration Control
- Risk and Opportunity Management
- Lifecycle Process Definition and Management
- Specialty Engineering
- Organizational Project Enabling Activities
- Other

**Successful candidates must have balanced experience across multiple areas**



# CSEP Certification Experience Requirements

- CSEP Systems Engineering Experience
  - Minimum 5 years of professional level experience in multiple SE functional areas (and any additional general years of experience necessary due to education status)
  - Minimum of at least 1 year of professional level SE experience in each of 3 or more of the SE experience areas
  - Must be documented on the INCOSE application form
- Experience Confirmation
  - Recommendations from at least 3 colleagues / peers / managers
  - References must cover at least 5 years and 3 areas of SE experience claimed by the applicant (including any additional years)
  - References must be knowledgeable in Systems Engineering (or general engineering for any additional years) and have at least five years of relevant experience
  - Must be documented on the INCOSE reference form



# ESEP Certification Experience Requirements

- ESEP Systems Engineering Experience
  - Minimum 25 years (20 if already a CSEP) of professional level experience in multiple SE functional areas (and any additional general years of experience necessary due to education status)
  - Minimum of at least 2 years of professional level SE experience in each of 6 or more of the SE experience areas
  - Must be documented on the INCOSE application form
- Experience Confirmation
  - Recommendations from at least 3 colleagues / peers / managers
  - References must cover at least 10 years of SE experience claimed by the applicant
  - References must be knowledgeable in Systems Engineering and have at least five years of relevant experience
  - Must be documented on the INCOSE reference form





# ESEP Professional Leadership Requirements

- Minimum of 5 years of professional leadership.
  - **Product Development Leadership Years**
    - Years of leadership in a product development position, such as chief engineer or development team lead
    - 1 year credit for each year in a leadership position - no limit
  - **Technical Society Leadership Years**
    - Leadership of a professional technical society, such as elected officer, appointed committee chair, editor, or thought leader
    - 0.5 year credit for each year of service – no limit
  - **Advanced Academics Years**
    - Technical Master's degree (or international equivalent)
      - 1 year credit
    - Technical Doctoral degree (or international equivalent)
      - 2 years credit if separate credit is given for a Master's degree
      - 3 years credit if separate credit is not given for a Master's degree
    - Systems engineering graduate-level teaching
      - 1 year of credit for each 500 hours of classroom instruction spread over a 3 year time period, limited to a maximum of 3 years
    - Category limited to a maximum of 4 years credit





# ESEP leadership verified by oral review

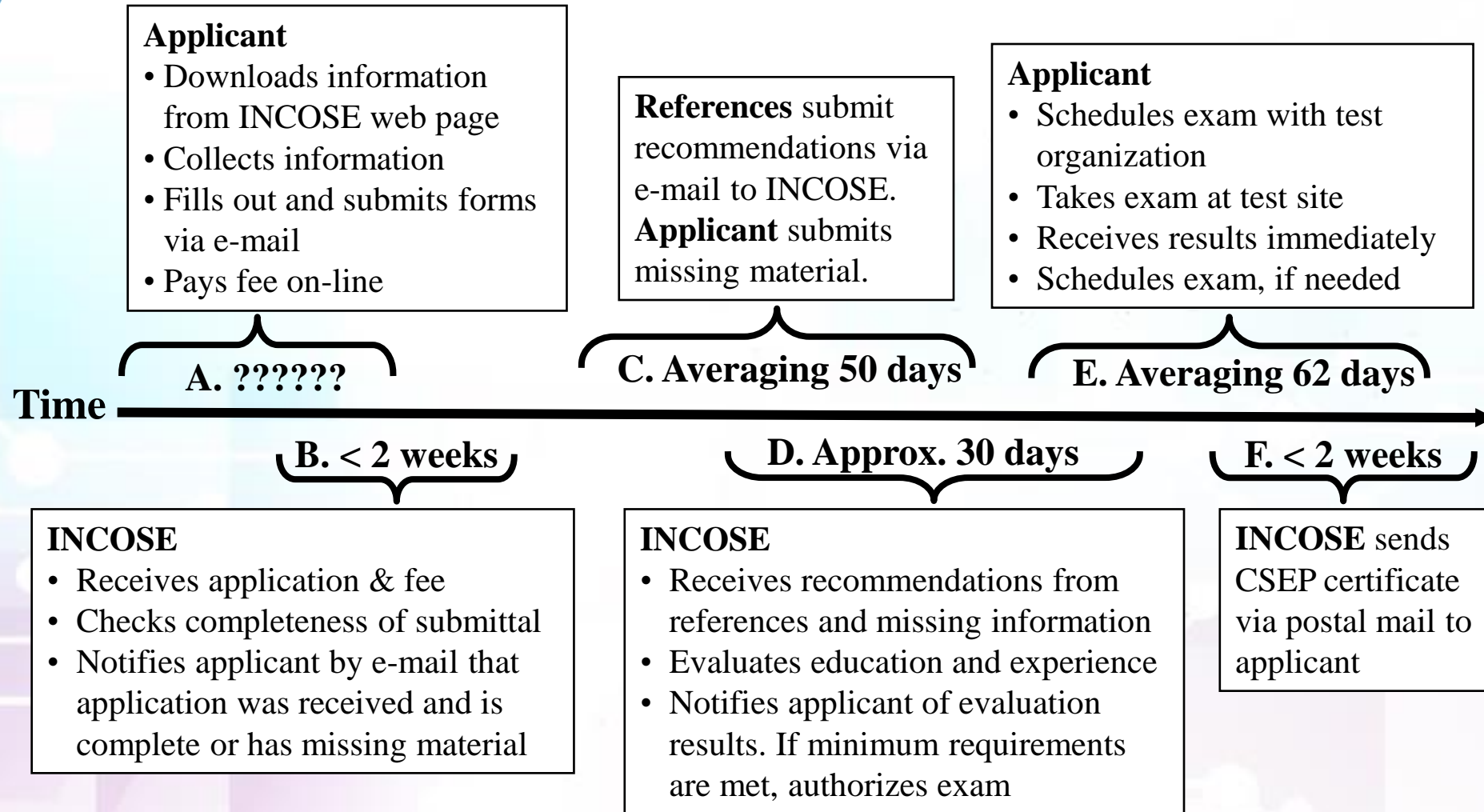
- Applicant must be willing to participate in an oral review
  - Purpose of the oral review is to confirm the applicant is a Systems Engineering leader and to verify the applicant's accomplishments and experience
  - The oral review questions are in behavior-based format
- At least two (2) of the references must be willing to participate in an oral review (if required)
  - Purpose of the reference oral review(s) is to confirm/supplement the applicant's information
- The oral reviews
  - Are done via phone
  - Typically do not exceeding 60 minutes (30 minutes for references)
  - Are in the English language
  - Are conducted by an evaluation panel consisting of INCOSE ESEPs trained as Certification Application Reviewers (CARs)

**The oral reviews focus on verifying the applicant's leadership, accomplishments, and experience.**



## How Long Will It Take to Get CSEP?

**There is no one answer. Much depends on the applicant.**



***While the times vary, the average time for CSEP is ~200 days.***



# Certification maintained through continuing education or re-test

- Certification is Valid for
  - 3 Years for CSEP, and must maintain INCOSE membership
  - 5 Years for ASEP and must maintain INCOSE membership
  - Indefinite for ESEP, must maintain INCOSE membership
  - Extensions (e.g., Acq) are renewed concurrent with the base certification, regardless of when earned
- Certification renewal requires
  - Minimum of 120 Professional Development Units (PDUs)
  - Or, pass knowledge exam again once certification expires



# PDU for Certification Renewal (1 of 2)

<b>Professional Development Activities</b> (All must be relevant to the practice of systems engineering)	<b>Credit</b>	<b>3/5 Year Limit</b>
<b>Technical Society Participation Category</b>		
<b>Be an INCOSE individual, senior, or student member</b>	<b>5 PDU/year</b>	<b>15 PDU</b>
<b>Attend non-peer-reviewed professional technical society event</b>	<b>1 PDU/hour</b>	<b>30 PDU</b>
<b>Attend peer-reviewed professional technical society event</b>	<b>1 PDU/hour</b>	<b>No limit</b>
<b>Participate on professional technical society working groups, committees, etc.</b>	<b>1 PDU/hour</b>	<b>No limit</b>
<b>Perform leadership role in professional technical society at local, national or international level</b>	<b>1 PDU/hour</b>	<b>No limit</b>
<b>Volunteer activities with youth in schools or community related to science, technology, engineering, and math (STEM)</b>	<b>1 PDU/hour</b>	<b>72 PDU</b>
<b>Volunteer activities with community, school, or non-profit organizations that help them accomplish their technical needs</b>	<b>1 PDU/hour</b>	<b>30 PDU</b>
<b>Earn an SE-relevant, exam-based, professional certification other than INCOSE SEP</b>	<b>5 PDU/certification (Up to 2 per renewal period)</b>	<b>10 PDU</b>



# PDU for Certification Renewal (2 of 2)

<b>Professional Development Activities</b> (All must be relevant to the practice of systems engineering)	<b>Credit</b>	<b>3/5 Year Limit</b>
<b>SE Course Work &amp; Publication Category</b>		
<b>Complete a technical graduate level course</b>	<b>2 PDU/class hour</b>	<b>No limit</b>
<b>Attend educational course, tutorial, or seminar</b>	<b>1 PDU/hour</b>	<b>No limit</b>
<b>Teach professional development coursework, including presentations not part of job function.</b>	<b>2 PDU/hour (prep) 1 PDU/hour (teach)</b>	<b>40 PDU</b>
<b>Write &amp; publish SE article</b>	<b>5 PDU/article</b>	<b>No limit</b>
<b>Write &amp; publish SE book</b>	<b>30 PDU (primary author)/book 10 PDU (contrib. author)/book</b>	<b>No limit</b>
<b>Attend vendor presentation with educational value</b>	<b>1 PDU/hour attendance</b>	<b>15 PDU</b>
<b>Consume SE-related media, including journal article, book, video, or audio</b>	<b>1 PDU/hour</b>	<b>15 PDU</b>
<b>SE Job Function Participation Category</b>		
<b>Receive patent award</b>	<b>10 PDU/award</b>	<b>No limit</b>
<b>Serve as designated lead systems engineer for a system, product or service</b>	<b>15 PDU/year</b>	<b>45 PDU</b>
<b>Lead organization to increase INCOSE systems engineering certifications</b>	<b>5 PDU/year</b>	<b>15 PDU</b>
<b>Volunteer (i.e., non-compensated) activities within your organization related to engineering and science</b>	<b>1 PDU/hour of effort</b>	<b>30 PDU</b>



# Any Questions?

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**[certification@incose.org](mailto:certification@incose.org)**

**Courtney Wright, CSEP**

**Certification Program Manager:**

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For more information visit:

**[www.incose.org/certification/](http://www.incose.org/certification/)**





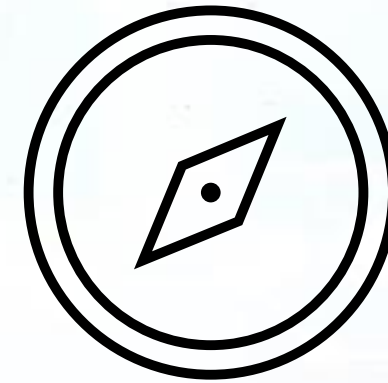
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# Guide Break out Time

Ask questions, discuss lesson learned, gain more insight into the IW experience