## INCOSE Systems Engineering Professional (SEP) Certification Program



International Council on Systems Engineering

A better world through a systems approach

**Program Summary** 

## What is INCOSE?

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization founded in 1990 to develop and disseminate the interdisciplinary principles and practices that enable the realization of successful systems. *A better world through a systems approach.* 

#### **MISSION**

Share, promote and advance the best of systems engineering from across the globe for the benefit of humanity and the planet.

#### VISION

The world's authority on Systems Engineering.

# Certification is just one of many INCOSE products and offerings.





#### **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.



If you have just started (or plan to start) practicing systems engineering or have recently graduated and are interested in system 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



### **Employer Job Postings ask for SEP**

• Employers who recognize and value SEP certifications

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Booz   Allen   Hamilton*	<pre><!--/--> IDEMIA</pre>	LOCKNEED MARTIN J	OCEANEERING®	
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ClearMotion	<b>JB</b> M'	Property and	Raytheon	
Engineered to Make a Difference	кврwyle	Newbrook Statest	<b>SAIC</b>	



### **Universities have Academic Equivalency**

• Some of the universities that have courses equivalent to the INCOSE Knowledge Exam:





## **Complete list of universities with AcEq**

#### • (as of June 2025):

- Auburn University, USA
- Colorado State University, USA
- Cornell University, USA
- Drexel University, USA
- FAMU-FSU, USA
- Florida Tech, USA
- George Mason University, USA
- George Washington University, USA
- Georgia Tech, USA
- John Hopkins University, USA
- Loyola Marymount University, USA
- Marquette University, USA

- Missouri University of S&T, USA
- Naval Postgraduate School, USA
- Penn State University, USA
- Queen Mary University of London, UK
- Southern Methodist University, USA
- Stevens Institute of Technology, USA
- University of Alabama in Huntsville, USA
- University of Arizona, USA
  - University of Detroit Mercy, USA
- University of Maryland, USA
- University of Maryland Baltimore County, USA
- University of Maryland Global Campus, USA

- University of Michigan, USA
- UNSW Canberra, Australia
- University of South Alabama, USA
- University of South Australia, Australia
- University of South-Eastern Norway, NOR
- University of Texas Arlington, USA
- University of Utah, USA
- Virginia Tech, USA
- Wayne State University, USA
- Weber State University, USA
- Wichita State University, USA
- Worcester Polytechnic Institute, USA



#### **Associate Systems Engineering Professional**



If you have just started practicing – or want to start practicing – systems engineering, then ASEP is for you. This certification is for people at the beginning of their career as a systems engineer. The ASEP has "book knowledge" but not yet significant experience as a systems engineer.

- Available for INCOSE Individual Members
- Knowledge verification required (INCOSE Knowledge Exam OR Academic Equivalency)
- Suitable for students, early career professionals, project and program managers, and all those who "speak systems engineering"



### **Certified Systems Engineering Professional**



If you are a practicing Systems Engineer with more than five years of systems engineering professional work experience, then CSEP is for you.

- Available for INCOSE Individual Members
- Knowledge verification required (INCOSE Knowledge Exam OR Academic Equivalency)
- At least five years (60 months) of experience required with at least 12 months in at least 3 different functional areas, confirmed by references
- Suitable for independent practitioners, which includes most systems



### Knowledge Verified by Exam or Coursework





#### **Knowledge Requirements**

- Based on INCOSE Systems Engineering Handbook v5 (available for free for INCOSE members)
- Required for ASEP and CSEP certification
- Can be verified through knowledge exam
- Can be verified through university coursework

#### Exam is

- 100 multiple-choice questions
- 100 minutes for exam
- Proctored by video through computer or in-person at INCOSE events
- Allowed to be attempted up to 3 times per 12 months

#### Academic Equivalency allows course assessments to meet knowledge requirement

- Must score highly in pre-approved university courses
- University professor submits list of eligible students to INCOSE
- Students become individual members and use course score to apply

### **Certification Experience Requirements**



# SYSTEMS ENGINEERING EXPERIENCE

- Applicants should document at least 60 months of work experience in SE, including at least 12 months in at least 3 different SE functional areas
- If applicants do not have a qualifying degree, they might need to document more than 5 months
- Work experience needs to be documented chronologically and without overlaps in Form1

MUST USE INCOSE FORMS AND FOLLOW INSTRUCTIONS, available at <u>SEP Forms</u>



### **Certification Reference Requirements**



## SYSTEMS ENGINEERING EXPERIENCE

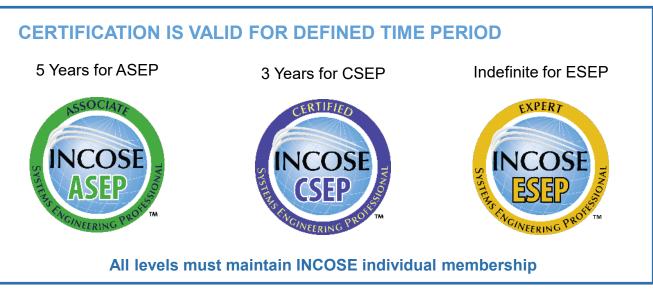
- Minimum requirement is recommendation letter from at least 1 manager. If more than 1 reference, can also use peers.
- References must confirm SE experience claims, including total months of work and experience in the different SE functional areas
- References must be knowledgeable of systems engineering (at least 5 years of experience in systems engineering)

MUST USE INCOSE FORMS AND FOLLOW INSTRUCTIONS, available at <u>SEP Forms</u>





### **ASEP and CSEP Renewal**



#### **CERTIFICATION RENEWAL REQUIRES CONTINUING EDUCATION**

- Minimum of 120 Professional Development Units (PDUs)
  - Technical Society participation
  - SE course work and publications
  - SE job functions beyond daily work





## **Any Questions?**

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For more information visit www.incose.org/certification

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