

Free
Webinar

1. UNDERSTANDING THE INCOSE CERTIFICATION PROCESS

- What is INCOSE?
- What is the INCOSE Certification Process?
- Differences between ASEP/CSEP/ESEP?
- Detail Qualification Requirements for the CSEP
- How to fill out the CSEP Application
- Relating your experience to the 14 SE Work Areas
- Making sure your Experience Matrix matches your Position Descriptions
- Tips for interacting with potential References

2. INTRODUCTION TO SE AND THE LIFE CYCLE MODEL

- 1 Systems Engineering Handbook Scope
- 2 Systems Engineering Overview
- 3.3 Life Cycle Stages
- 3.2 Life Cycle Characteristics
- 7 Organizational Project-Enabling Processes
- 7.1 Life Cycle Model Management Process

3. APPROACHES TO SYSTEMS ENGINEERING

- 7.3 Portfolio Management Process
- 8 Tailoring process and Application of Systems Engineering
- 3.4 Life Cycle Approaches
 - 3.4.1 Iteration and Recursion
 - 3.4.2 Sequential Methods
 - 3.4.3 Incremental and Iterative Methods
- 9.2 Model-Based Systems Engineering
- 9.4 Object-Oriented Systems Engineering Method
- 9.8 Lean Systems Engineering
- 9.9 Agile Systems Engineering
- 10.13 Value Engineering
- 3.5 What Is Best for Your Organization, Project, or Team?
- 7.5 Quality Management Process
- 7.6 Knowledge Management Process

4. PROJECT PLANNING FROM A SE POV

- 7.2 Infrastructure Management Process
- 7.4 Human Resource Management Process
- 6.1 Acquisition Process
- 6.2 Supply Process
- 5.1 Project Planning Process
- 9.7 Integrated Product and Process Development
- 5.2 Project Assessment and Control Process

5. TECHNICAL MANAGEMENT PROCESSES

- 5.7 Measurement Process
- 5.3 Decision Management Process
- 5.4 Risk Management Process
- 5.5 Configuration Management Process
- 5.6 Information Management Process
- 5.8 Quality Assurance Process

6. REQUIREMENTS

- 9.1 Modeling and Simulation
- 9.5 Prototyping
- 4.6 System Analysis Process
- 4.1 Business or Mission Analysis Process
- 4.2 Stakeholder Needs and Requirements Definition Process
- 4.3 System Requirements Definition Process
- 9.6 Interface Management

7. DESIGN CONSIDERATIONS

- 9.3 Functions-Based Systems Engineering Method
- 10 Specialty Engineering Activities
 - ♦ Affordability/Cost-Effectiveness
 - ♦ Electromagnetic Compatibility
 - ♦ Environmental Engineering Impact Analysis
 - ♦ Interoperability Analysis
 - ♦ Logistics Engineering
 - ♦ Manufacturing and Producibility Analysis
 - ♦ Mass Properties Engineering
 - ♦ Reliability, Availability, and Maintainability
 - ♦ Resilience Engineering
 - ♦ System Safety Engineering
 - ♦ System Security Engineering
 - ♦ Training Needs Analyses
 - ♦ Usability Analysis/HSI
 - ♦ Value Engineering

8: TECHNICAL PROCESSES

- 4.4 Architecture Definition Process
- 4.5 Design Definition Process
- 4.7 Implementation Process
- 4.8 Integration Process
- 4.9 Verification Process
- 4.1 Transition Process
- 4.11 Validation Process
- 4.12 Operation Process
- 4.13 Maintenance Process
- 4.14 Disposal Process

“I found the mega-process flow diagram to be really very useful as it served as a visual thread of all the context diagrams.”

~ Previous Student

About the Program

The International Council on Systems Engineering (**INCOSE**) Certified Systems Engineering Professional (**CSEP**) designation is a highly sought after certification for those engineers seeking recognition of their education, experience, and knowledge in the highly competitive field of Systems Engineering.

Obtaining a CSEP designation is not easy, which is why it's so valuable. You have to demonstrate your real world systems experience via a formal application that includes at least three professional references. And you need to pass a two-hour, 120-question, multiple-choice exam. **The purpose of this course is to help prepare potential candidates for this demanding process by learning the requirements for a successful CSEP application and to become familiar with the INCOSE SE Handbook, which is the basis for the examination.**

SE Scholar, LLC has developed a unique approach to teaching the INCOSE SE Handbook which contextualizes the various Organizational, Project and Technical processes that are necessary to realized a "System-of-Interest." **With the aid of a comprehensive Process Flow diagram, we will walk the students from the Life Cycle Model Management Process to the Disposal Process in a logical and sequential manner**, while covering the contents of the entire INCOSE SE Handbook. This course has a **significant on-line portion which provides study material and numerous quizzes** as well as a sample exam. These tests are based on the structure of the INCOSE CSEP Exam, thus **providing the student with a familiarity and comfort level they'll need to pass the Exam**. These tests are a valuable resource for the student and can be repeated as many times as the student desires.

Because the INCOSE CSEP Exam is used for the ASEP application as well, this course is also suited for those applying for their ASEP designation. This course is one of the best in the industry because of its comprehensive and logical approach. In the end the student will:

- ◆ **Receive tips on how to fill out the INCOSE CSEP Application.**
- ◆ **Learn the context of the 31 Processes within the INCOSE SE Handbook.**
- ◆ **Have access to dozens of practice Quizzes.**
- ◆ **Have a fundamental understanding of Systems Engineering as a perspective, practice and profession.**

About the Instructor

Your on-line instructor will be **Paul Martin, ESEP**, a practicing Systems Engineer with over 40 years of experience. He has been everything from a Product Engineer for General Electric Products Division to a Software Systems Engineer for a multi-million dollar Navy program. Presently he's a Systems Engineering Technical Adviser (SETA) supporting DoD. He has earned a Master of Science in Systems Engineering along with a Certificate in Software Systems Engineering from George Mason University in 1994. He has been involved with INCOSE since 2000 and has served on the local [Chesapeake INCOSE Chapter](#) Board of Directors in the past as Programs Director and Communications Officer. In March 2007, he became an INCOSE "Certified Systems Engineering Professional." ([Read about that experience here](#)). In 2012 he earned the INCOSE "Expert Systems Engineering Professional" certification. Paul also serves as an Adjunct Professor in the UMBC College of Engineering and Information Technology, Systems Engineering Graduate Programs where he teaches ENEE 663: System Implementation, Integration, and Test and ENEE 667: Advanced Systems Engineering Processes. He's also a Senior Member of IEEE .

Paul has been teaching a INCOSE SEP Exam Preparation Courses since 2009 and has taught several hundred students.

A Great Value

- ◆ Half the price of other courses
- ◆ No Travel Required
- ◆ Study at your own pace

