

Professional Development Short Course On:

CSEP Preparation

Instructor:

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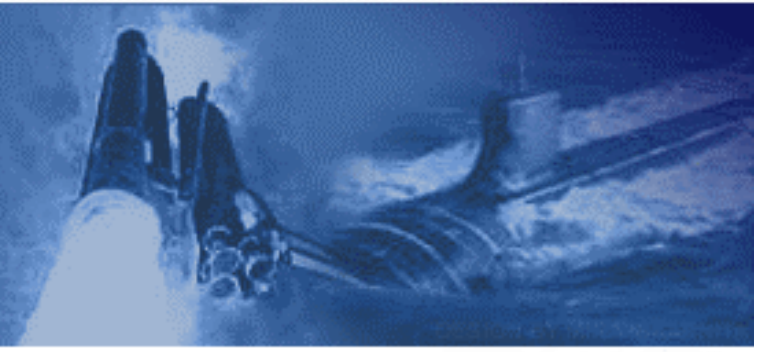
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Table of Contents

| | | |
|------------|--|-----------|
| 1 | Course Introduction | 1 |
| 1.1 | Course Overview..... | 2 |
| 1.1.1 | System Examples..... | 2 |
| 1.1.2 | Course Learning Objectives..... | 3 |
| 1.1.3 | Course Schedule | 4 |
| 1.1.4 | Administrative | 6 |
| 1.2 | CSEP Introduction | 7 |
| 1.2.1 | What is the CSEP?..... | 7 |
| 1.3 | INCOSE Systems Engineering Handbook | 9 |
| 1.3.1 | Handbook Application..... | 9 |
| 1.3.2 | Contents and Organization..... | 9 |
| 1.3.3 | Process N ² Chart | 12 |
| 1.3.4 | Summary of Handbook..... | 12 |
| 1.4 | Self-Assessment | 13 |
| 1.5 | CSEP Application | 14 |
| 1.5.1 | Complete Application Package..... | 14 |
| 1.5.2 | Experience | 15 |
| 1.5.3 | References..... | 16 |
| 1.5.4 | Exam Scheduling..... | 17 |
| 1.5.5 | What Kind of Test is CSEP?..... | 18 |
| 1.6 | Reference Documents | 19 |
| 1.7 | Lesson Summary..... | 19 |
| 1.7.1 | Quiz #1..... | 19 |
| 1.7.2 | Lesson 1 Summary | 20 |
| 2 | Systems Engineering Overview | 21 |
| 2.1 | Definitions and Origins | 22 |
| 2.1.1 | Definition of Systems Engineering..... | 22 |
| 2.1.2 | System Engineering Concepts | 23 |
| 2.1.3 | Origins | 24 |
| 2.1.4 | Terms and Definitions | 24 |
| 2.1.5 | Hierarchy within a System..... | 26 |
| 2.2 | Systems of Systems..... | 26 |
| 2.3 | Value of Systems Engineering | 28 |
| 2.3.1 | Use of Systems Engineering..... | 28 |
| 2.3.2 | Value..... | 29 |
| 2.4 | Lesson Summary..... | 30 |
| 2.4.1 | Quiz #2..... | 30 |
| 2.4.2 | Lesson 2 Summary | 31 |

| | | |
|------------|---|-----------|
| 3 | Generic Life Cycle Stages | 33 |
| 3.1 | Introduction..... | 34 |
| 3.2 | Life Cycles and Stages | 35 |
| 3.2.1 | Aspects and Stages..... | 35 |
| 3.2.2 | Decision Gates | 36 |
| 3.2.3 | Stage Descriptions | 36 |
| 3.3 | Development Approaches..... | 38 |
| 3.4 | System Development Examples | 39 |
| 3.5 | Lesson Summary | 40 |
| 3.5.1 | Quiz #3..... | 40 |
| 3.5.2 | Lesson 3 Summary | 41 |
| 4 | Technical Processes..... | 43 |
| 4.1 | Introduction..... | 44 |
| 4.2 | Stakeholder Requirements Definition..... | 46 |
| 4.2.1 | Context and Purpose | 46 |
| 4.2.2 | Inputs, Outputs and Activities | 47 |
| 4.2.3 | Common Approaches and Tips | 48 |
| 4.2.4 | Capture Source Requirements | 48 |
| 4.2.5 | Concept of Operations (ConOps) | 50 |
| 4.2.6 | Quiz #4.1..... | 51 |
| 4.3 | Requirements Analysis | 52 |
| 4.3.1 | Context and Purpose | 52 |
| 4.3.2 | Inputs, Outputs and Activities | 52 |
| 4.3.3 | Common Approaches and Tips | 53 |
| 4.3.4 | Creating Functional/Performance Requirements..... | 54 |
| 4.3.5 | Quality Function Deployment (QFD)..... | 56 |
| 4.3.6 | Requirements Characteristics | 56 |
| 4.4 | Architectural Design..... | 58 |
| 4.4.1 | Context and Purpose | 58 |
| 4.4.2 | Inputs, Outputs and Activities | 58 |
| 4.4.3 | Common Approaches and Tips | 59 |
| 4.4.4 | Concepts..... | 60 |
| 4.4.5 | Functional Analysis and Allocation..... | 60 |
| 4.4.6 | System Architecture Synthesis | 63 |
| 4.4.7 | Specification Tree | 66 |
| 4.4.8 | Requirements Allocation and Traceability | 67 |
| 4.4.9 | Quiz #4.2..... | 68 |
| 4.5 | Implementation | 68 |
| 4.5.1 | Context and Purpose | 68 |
| 4.5.2 | Inputs, Outputs and Activities | 69 |
| 4.5.3 | Common Approaches and Tips | 70 |
| 4.5.4 | Requirements and Design Loops | 70 |

| | | |
|-------------|--|-----------|
| 4.6 | Integration | 71 |
| 4.6.1 | Context and Purpose | 71 |
| 4.6.2 | Inputs, Outputs and Activities | 71 |
| 4.6.3 | Common Approaches and Tips | 72 |
| 4.6.4 | System Build..... | 73 |
| 4.6.5 | Integration with External Systems..... | 73 |
| 4.7 | Verification..... | 74 |
| 4.7.1 | Context and Purpose | 74 |
| 4.7.2 | Inputs, Outputs and Activities | 74 |
| 4.7.3 | Common Approaches and Tips | 75 |
| 4.7.4 | Verification Methods | 76 |
| 4.7.5 | Quiz #4.3..... | 76 |
| 4.8 | Transition | 77 |
| 4.8.1 | Context and Purpose | 77 |
| 4.8.2 | Inputs, Outputs and Activities | 77 |
| 4.8.3 | Common Approaches and Tips | 78 |
| 4.9 | Validation | 79 |
| 4.9.1 | Context and Purpose | 79 |
| 4.9.2 | Inputs, Outputs and Activities | 79 |
| 4.9.3 | Common Approaches and Tips | 80 |
| 4.9.4 | Validation Concepts..... | 81 |
| 4.10 | Operation..... | 82 |
| 4.10.1 | Context and Purpose | 82 |
| 4.10.2 | Inputs, Outputs and Activities | 82 |
| 4.10.3 | Common Approaches and Tips | 83 |
| 4.11 | Maintenance | 84 |
| 4.11.1 | Context and Purpose | 84 |
| 4.11.2 | Inputs, Outputs and Activities | 84 |
| 4.11.3 | Common Approaches and Tips | 85 |
| 4.12 | Disposal..... | 86 |
| 4.12.1 | Context and Purpose | 86 |
| 4.12.2 | Inputs, Outputs and Activities | 86 |
| 4.12.3 | Common Approaches and Tips | 87 |
| 4.13 | Lesson Summary..... | 88 |
| 4.13.1 | Quiz #4.4..... | 88 |
| 4.13.2 | Lesson 4 Summary | 88 |
| 5 | Project Processes..... | 91 |
| 5.1 | Introduction..... | 92 |
| 5.2 | Project Planning..... | 93 |
| 5.2.1 | Context and Purpose | 93 |
| 5.2.2 | Inputs, Outputs and Activities | 93 |
| 5.2.3 | Common Approaches and Tips | 95 |
| 5.2.4 | Planning Documents | 95 |

| | | |
|------------|--|------------|
| 5.2.5 | Integrated Product and Process Development (IPPD)..... | 96 |
| 5.2.6 | Integrated Product Teams (IPT) | 96 |
| 5.2.7 | Systems Engineering Plan (SEP)..... | 99 |
| 5.2.8 | Tailoring..... | 101 |
| 5.3 | Project Assessment | 104 |
| 5.3.1 | Context and Purpose | 104 |
| 5.3.2 | Inputs, Outputs and Activities | 104 |
| 5.3.3 | Common Approaches and Tips | 105 |
| 5.3.4 | Technical Performance Measures (TPM)..... | 106 |
| 5.3.5 | Quiz #5.1..... | 106 |
| 5.4 | Project Control..... | 107 |
| 5.4.1 | Context and Purpose | 107 |
| 5.4.2 | Inputs, Outputs and Activities | 107 |
| 5.4.3 | Common Approaches and Tips | 108 |
| 5.5 | Decision-Making | 109 |
| 5.5.1 | Context and Purpose | 109 |
| 5.5.2 | Inputs, Outputs and Activities | 109 |
| 5.5.3 | Common Approaches and Tips | 110 |
| 5.5.4 | Decision Gates | 111 |
| 5.5.5 | Difficult Decisions..... | 111 |
| 5.5.6 | Trade Studies | 112 |
| 5.6 | Risk & Opportunity Management | 115 |
| 5.6.1 | Context and Purpose | 115 |
| 5.6.2 | Inputs, Outputs and Activities | 115 |
| 5.6.3 | Common Approaches and Tips | 116 |
| 5.6.4 | Risk Concepts | 117 |
| 5.6.5 | Steps for Risk Handling..... | 118 |
| 5.7 | Configuration Management..... | 119 |
| 5.7.1 | Context and Purpose | 119 |
| 5.7.2 | Inputs, Outputs and Activities | 119 |
| 5.7.3 | Common Approaches and Tips | 120 |
| 5.7.4 | Engineering Change Proposals (ECP)..... | 121 |
| 5.7.5 | Configuration Management Methods | 122 |
| 5.8 | Information Management | 123 |
| 5.8.1 | Context and Purpose | 123 |
| 5.8.2 | Inputs, Outputs and Activities | 123 |
| 5.8.3 | Common Approaches and Tips | 124 |
| 5.8.4 | Information Management Concepts..... | 125 |
| 5.9 | Lesson Summary..... | 126 |
| 5.9.1 | Quiz #5.2..... | 126 |
| 5.9.2 | Lesson 5 Summary | 127 |
| 6 | Enterprise and Agreement Processes | 129 |
| 6.1 | Introduction..... | 130 |

| | | |
|------------|---|------------|
| 6.2 | Enterprise Environment Management | 131 |
| 6.2.1 | Context and Purpose | 131 |
| 6.2.2 | Inputs, Outputs and Activities | 131 |
| 6.2.3 | Common Approaches and Tips | 132 |
| 6.3 | Investment Management..... | 133 |
| 6.3.1 | Context and Purpose | 133 |
| 6.3.2 | Inputs, Outputs and Activities | 133 |
| 6.3.3 | Common Approaches and Tips | 134 |
| 6.3.4 | Investment Analysis..... | 135 |
| 6.3.5 | Life Cycle Cost Analysis | 135 |
| 6.4 | System Life Cycle Processes Management | 136 |
| 6.4.1 | Context and Purpose | 136 |
| 6.4.2 | Inputs, Outputs and Activities | 136 |
| 6.4.3 | Common Approaches and Tips | 137 |
| 6.4.4 | Systems Engineering Processes & Practices | 138 |
| 6.4.5 | Continuous Process Improvement | 139 |
| 6.5 | Resource Management | 140 |
| 6.5.1 | Context and Purpose | 140 |
| 6.5.2 | Inputs, Outputs and Activities | 140 |
| 6.5.3 | Common Approaches and Tips | 141 |
| 6.5.4 | Resource Management Concepts..... | 142 |
| 6.5.5 | Quiz #6.1..... | 142 |
| 6.6 | Quality Management | 143 |
| 6.6.1 | Context and Purpose | 143 |
| 6.6.2 | Inputs, Outputs and Activities | 143 |
| 6.6.3 | Common Approaches and Tips | 144 |
| 6.6.4 | Quality Management Methods..... | 145 |
| 6.7 | Acquisition..... | 146 |
| 6.7.1 | Context and Purpose | 146 |
| 6.7.2 | Inputs, Outputs and Activities | 146 |
| 6.7.3 | Common Approaches and Tips | 147 |
| 6.7.4 | Defining the Acquisition..... | 148 |
| 6.8 | Supply | 149 |
| 6.8.1 | Context and Purpose | 149 |
| 6.8.2 | Inputs, Outputs and Activities | 149 |
| 6.8.3 | Common Approaches and Tips | 150 |
| 6.8.4 | Acquisition and Supply Concepts..... | 151 |
| 6.9 | Lesson Summary..... | 152 |
| 6.9.1 | Quiz #6.2..... | 152 |
| 6.9.2 | Lesson 6 Summary | 153 |
| 7 | Specialty Engineering Activities | 155 |
| 7.1 | Integrated Logistics Support | 158 |
| 7.2 | Electromagnetic Compatibility Analysis | 159 |

| | | |
|-------------|--|------------|
| 7.3 | Environmental Impact Analysis | 160 |
| 7.4 | Human Systems Integration | 161 |
| 7.5 | Mass Properties Engineering Analysis | 163 |
| 7.6 | Modeling, Simulation, and Prototyping | 164 |
| 7.6.1 | System Modeling Concepts | 165 |
| 7.6.2 | Types of Models | 165 |
| 7.6.3 | Model Validation and Use | 166 |
| 7.6.4 | System Modeling Language (SysML)..... | 166 |
| 7.7 | Safety and Health Hazard Analysis | 167 |
| 7.8 | Sustainment Engineering Analysis | 168 |
| 7.9 | Training Needs Analysis | 168 |
| 7.10 | Lesson Summary | 169 |
| 7.10.1 | Quiz #7..... | 169 |
| 7.10.2 | Lesson 7 Summary | 170 |
| 8 | After-Class Plan | 171 |
| 8.1 | Using the Self-Assessment | 172 |
| 8.2 | Study Plans and Methods | 174 |
| 8.2.1 | Effective Study Methods | 175 |
| 8.2.2 | Using the Sample Exams | 176 |
| 8.2.3 | How to Reach Us | 177 |
| 8.3 | Test-Taking | 178 |
| 8.3.1 | The CSEP Exam Process and Tools | 178 |
| 8.3.2 | Strategies for Multiple-Choice Exams..... | 180 |
| 8.3.3 | Just Before the Exam | 182 |
| 8.3.4 | Five Rules for Test-Taking..... | 183 |
| 8.4 | Lesson Summary | 184 |
| 9 | Course Summary | 185 |
| 9.1 | Lesson Summary | 186 |
| 9.1.1 | Lesson 1 Objectives..... | 186 |
| 9.1.2 | Lesson 2 Objectives..... | 187 |
| 9.1.3 | Lesson 3 Objectives..... | 187 |
| 9.1.4 | Lesson 4 Objectives..... | 187 |
| 9.1.5 | Lesson 5 Objectives..... | 187 |
| 9.1.6 | Lesson 6 Objectives..... | 187 |
| 9.1.7 | Lesson 7 Objectives..... | 188 |
| 9.1.8 | Lesson 8 Objectives..... | 188 |
| 9.2 | CSEP Summary | 188 |
| 9.3 | Course Evaluation | 190 |

Appendices

| | | |
|----------|---|------------|
| A | Self-Assessment Quiz..... | A-1 |
| B | Sample Examination #1..... | B-1 |
| C | Sample Examination #2..... | C-1 |
| D | Answer Key to Sample Examinations..... | D-1 |

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Course at a Glance

| | Topics | Topics |
|-------------|---|---|
| 8:30-9:30 | Lesson 1 Course Introduction <i>CSEP introduction</i> <i>Intro to SE Handbook</i> <i>Self-assessment quiz</i> <i>CSEP application</i> | Lesson 5 Project Processes <i>Project planning</i> <i>Project assessment</i> |
| Break | | |
| 9:40-10:50 | Lesson 2 Systems Engineering Overview <i>Definitions and origins</i> <i>Systems of systems</i> <i>Value of SE</i> | Lesson 5 (cont'd) <i>Project control</i> <i>Decision-making</i> <i>Risk & opportunity management</i> <i>Configuration management</i> <i>Information management</i> |
| Break | | |
| 11:00-12:00 | Lesson 3 Generic Life Cycle Stages <i>Life cycles and stages</i> <i>Development approaches</i> <i>System development examples</i> | Lesson 6 Enterprise & Agreement Processes <i>Enterprise environment management</i> <i>Investment management</i> <i>System life cycle processes mgmt</i> <i>Resource management</i> |
| LUNCH | | |
| 1:00-2:00 | Lesson 4 Technical Processes <i>Stakeholder requirements definition</i> | Lesson 6 (cont') <i>Quality management</i> <i>Acquisition</i> <i>Supply</i> |
| Break | | |
| 2:10-3:20 | Lesson 4 (cont'd) <i>Requirements analysis</i> <i>Architectural design</i> | Lesson 7 Specialty Engineering Activities <i>Integrated logistic support</i> <i>Specialty analyses:</i> <i>EMC, environmental, mass properties, safety & health hazard, sustainment, training needs</i> <i>Human systems integration</i> <i>Modeling, simulation, prototyping</i> |
| Break | | |
| 3:30-4:30 | Lesson 4 (cont'd) <i>Implementation, Integration</i> <i>Verification</i> <i>Transition</i> <i>Validation</i> <i>Operation, Maintenance</i> <i>Disposal</i> | Lesson 8 After-Class Plan <i>Using the self-assessment</i> <i>Study plans & methods</i> <i>Test-taking</i> Lesson 9 Course Summary |

1.2 CSEP Introduction

Notes

1.2.1 What is the CSEP?

What is the CSEP?

- Foundation level of a series of certifications granted by INCOSE in systems engineering
- Based on education, experience, references, and demonstrated knowledge by exam
- Recognized benefits
 - Formal, portable recognition
 - Discriminator in job market
 - Career competitive advantage

The diagram illustrates the career path for INCOSE certifications. It starts with ASEP (Associate Systems Engineering Professional) at the Entry Level. An arrow points to CSEP (Certified Systems Engineering Professional) at the Foundation Level. From CSEP, two arrows branch out: one to CSEP-Acq (Certified Systems Engineering Professional with US DoD Acquisition) under Discipline Extensions, and another to ESEP (Expert Systems Engineering Professional) at the Senior Level. A legend at the bottom identifies the acronyms: ESEP is Expert Systems Engineering Professional, CSEP-Acq is CSEP w/ US DoD Acquisition, CSEP is Certified Systems Engineering Professional, and ASEP is Associate Systems Engineering Professional.

The INCOSE Certified Systems Engineering Professional (CSEP) is the foundation level of a series of certification offered by INCOSE. It has significant benefits to your career. The CSEP is based on experience, education, references, and an examination.

Requirements for Certification

| Level | Experience | Education | References | Exam |
|----------|------------|----------------------------------|--------------|--------------------------|
| ASEP | None | Technical degree | None | CSEP |
| CSEP | 5 years | Technical degree (or experience) | 3 references | CSEP |
| CSEP-Acq | 5 years | Technical degree (or experience) | 3 references | CSEP + DOD Acq Guidebook |
| ESEP | TBD | TBD | TBD | None |

Focus of this course

Notes

Application/Renewal Process

New application

- Fill out and submit application form
- Provide proof of education
- Have 3 people submit reference forms
- Sign ethics statement
- Pay INCOSE fee
 - ASEP: \$150
 - CSEP: \$400 (\$300 mbr)*
- Schedule/pay exam
 - \$80 US (\$120 non-US, \$165 Japan)
- Pass exam

Renewal

- 3 yrs CSEP, 5 yrs ASEP
- Do and log professional development activities
 - 12 CEUs or 120 hrs during renewal period
 - Courses, published papers, patents, presentations
- Fill out/submit renewal form
- Pay INCOSE fee
 - ASEP: \$100
 - CSEP: \$150 (\$100 mbr)*

**Other fee structures exist for upgrade, CSEP-Acq*

INCOSE establishes the application and renewal process for CSEP, summarized on this slide. Fees must be paid both to INCOSE (for the certification) and to the Prometric examination facility (for the examination service).

1.3 INCOSE Systems Engineering Handbook

Notes

1.3.1 Handbook Application

Source: SEH 1.2

SE Handbook Application

- Consistent with ISO/IEC-15288 – an int'l standard that is a generic process description
- Handbook further elaborates the processes and activities
- Processes and activities do not supersede any int'l, national or local laws or regulations
- For commercial industry, handbook is a reference to practices and methods that have proven beneficial

The diagram illustrates the structure of ISO/IEC-15288 Processes, organized into four main categories:

- TECHNICAL PROCESSES:** Stak'r Needs Defn, Reqs Analysis, Arch Design, Implementation, Integration, Verification, Transition, Validation, Operation, Disposal.
- PROJECT PROCESSES:** Planning, Assessment, Control, Decision Mgmt, Risk & Opp Mgmt, Config Mgmt, Information Mgmt.
- ENTERPRISE PROCESSES:** Enterprise Mgmt, Investment Mgmt, Sys Life Cycle Mgmt, Resource Mgmt, Quality Mgmt.
- AGREEMENT PROCESSES:** Acquisition, Supply.

ISO/IEC-15288 Processes

SOURCES:
SEH 1.1 – 1.3,
App.A

The CSEP examination is based solely on the INCOSE Systems Engineering Handbook version 3.1, which is consistent with the international standard ISO/IEC 15288.

1.3.2 Contents and Organization

Source: SEH 1.3

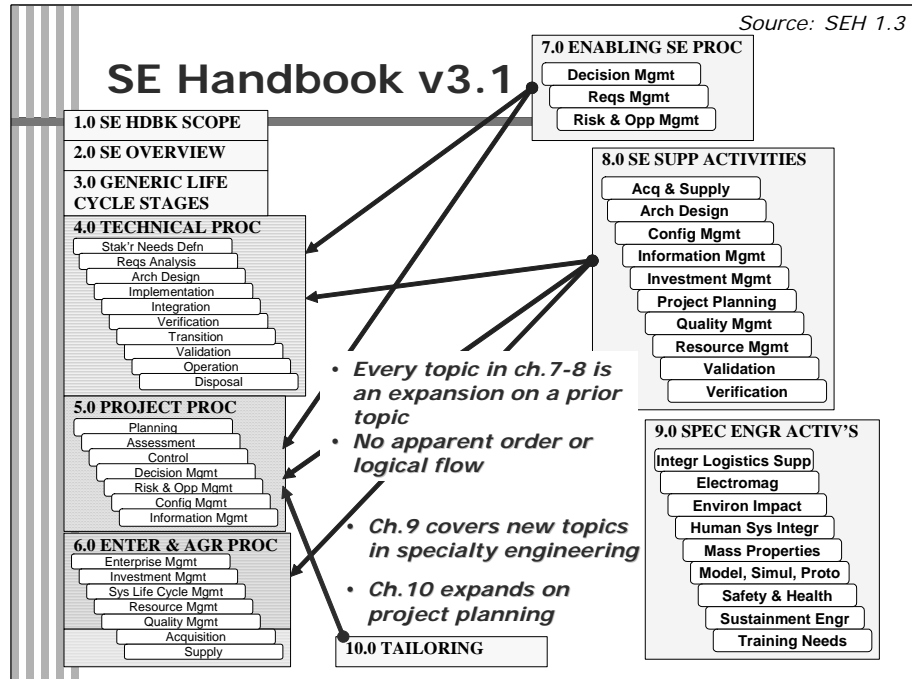
SE Handbook v3.1

The diagram shows the organization of SE Handbook v3.1, structured into chapters 1.0 through 6.0:

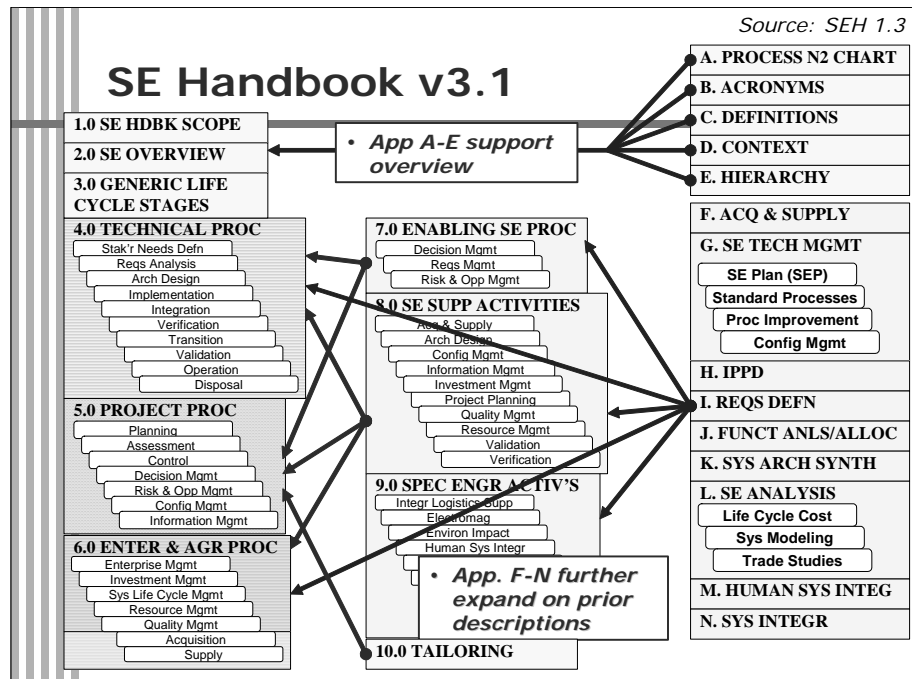
- 1.0 SE HDBK SCOPE**
- 2.0 SE OVERVIEW**
- 3.0 GENERIC LIFE CYCLE STAGES**
- 4.0 TECHNICAL PROC:** Stak'r Needs Defn, Reqs Analysis, Arch Design, Implementation, Integration, Verification, Transition, Validation, Operation, Disposal.
- 5.0 PROJECT PROC:** Planning, Assessment, Control, Decision Mgmt, Risk & Opp Mgmt, Config Mgmt, Information Mgmt.
- 6.0 ENTERPRISE & AGREEMENT PROC:** Enterprise Mgmt, Investment Mgmt, Sys Life Cycle Mgmt, Resource Mgmt, Quality Mgmt, Acquisition, Supply.

- Ch. 1-3: Preliminary definitions, overview, life cycle stages
- Chapters 4-6: closely follow ISO/IEC-15288
 - Combination of Enterprise Processes and Agreement Processes into ch.6

Notes



However, the INCOSE handbook expands on the information in ISO/IEC 15288. Chapters 7-10 provide additional information that supports the standard processes. In addition, the handbook provides extensive appendices that expand even further, sometimes supporting the standard processes and sometimes further supporting the additional material of chapters 7-10.



1.5.2 Experience

Experience – Breadth & Depth

- Required 5 years of SE experience
- Without 4-yr degree in technical field
 - With other 4-yr degree, sub 10 yrs experience (5 yr SE)
 - With no 4-yr degree, sub 15 yrs experience (5 yr SE)
- CSEP requires both breadth and depth – at minimum 5 yrs experience,
 - No more depth than 3 yr in any one area
 - Minimum 1 yr experience in at least 3 areas

Experience areas of interest

| | |
|---|---------------------------------|
| Requirements engineering | Process definition |
| Risk and opportunity mgmt | Tool support |
| Baseline control | Training |
| Technical planning | Systems integration |
| Technical effort assessment | Quality assurance |
| Architecture/design development | Specialty engineering |
| Qualification, verification, validation | Other justifiable SE activities |

Obtaining the CSEP certification is more than just filling out the forms. You must convey your experience in such a way as to convince the INCOSE reviewers of your qualifications for the certification. Write your resume section to support the “experience areas of interest” to INCOSE. Have someone else review your resume as written.

Experience – Résumé

- Purpose: prove your experience qualifications, an important part of certification!
 - So write it specifically for the reviewers - keep in mind what they need
- Break your periods of employment, or significant changes of responsibility within the organization
- Focus on SE responsibilities and experience
 - Direct contributions to work efforts
 - Cite specific system products if possible
 - Ex: authored, defined, planned SEMP, ConOps, VV Plan
 - Ex: “designed architecture,” “wrote requirements,” “guided design team of 20 people”
 - Weaker: “involved in,” “contributed to,” “led an effort”
- Provide current contacts to people who can verify your efforts – supervisors are best, peers are okay

Take care!
Often not submitted well, sometimes rejected

Notes

SOURCES:
SEH 3.1

3.1 Introduction

Source: SEH 3.1

Life Cycles and Approaches

- Every man-made system has a life cycle. Define it:
 - to establish a framework for meeting the stakeholder needs in an orderly and efficient manner.
 - by defining stages with decision gates to determine readiness to move from one stage to the next
- Skipping gates can greatly increase the risk
- Role of systems engineer covers the entire life cycle for the system-of-interest
 - orchestrate the development of a solution from requirements determination through operations and system retirement
 - assure that domain experts are properly involved, that all advantageous opportunities are pursued, and that all significant risks are identified and mitigated.
- SE tasks usually concentrated at beginning, but both commercial and government recognize need for SE through the life span

SEH chapter 3 concerns itself with representations of system life cycles and development approaches. It is based primarily on the language from ISO/IEC 15288.

Lesson Scope

- Core material: SEH Chapter 3
- Supporting material
 - None

| |
|--------------------------------------|
| 1.0 SE HDBK SCOPE |
| 2.0 SE OVERVIEW |
| 3.0 GENERIC LIFE CYCLE STAGES |
| 4.0 TECHNICAL PROC |
| 5.0 PROJECT PROC |
| 6.0 ENTERPRISE & AGREEMENT PROC |

| |
|-------------------------------|
| 7.0 ENABLING SE PROC |
| 8.0 SE SUPPORT ACTIVITIES |
| 9.0 SPECIALTY ENGR ACTIVITIES |
| 10.0 TAILORING |

| |
|---------------------|
| A. PROCESS N2 CHART |
| B. ACRONYMS |
| C. DEFINITIONS |
| D. CONTEXT |
| E. HIERARCHY |
| F. ACQ & SUPPLY |
| G. SE TECH MGMT |
| H. IPPD |
| I. REQS DEFN |
| J. FUNCT ANLS/ALLOC |
| K. SYS ARCH SYNTH |
| L. SE ANALYSIS |
| M. HUMAN SYS INTEG |
| N. SYS INTEGR |

3.2 Life Cycles and Stages

3.2.1 Aspects and Stages

Source: SEH 3.2.1, 3.3

Life Cycle Stages

| LIFE CYCLE STAGES | PURPOSE | DECISION GATES |
|-------------------|---|--|
| CONCEPT | Identify stakeholders' needs Explore concepts Propose viable solutions | Decision Options – Execute next stage – Continue this stage – Go to a preceding stage – Hold project activity – Terminate project |
| DEVELOPMENT | Refine system requirements Create solution description Build system Verify and validate system | |
| PRODUCTION | Produce systems Inspect and test [verify] | |
| UTILIZATION | Operate system to satisfy users' needs | |
| SUPPORT | Provide sustained system capability | |
| RETIREMENT | Store, archive, or dispose of system | |

Business Aspect

Budget Aspect

Technical Aspect

Every project has three aspects to be considered: the business aspect (business case), the budget aspect (funding), and the technical aspect (product). The systems engineer creates technical solutions that are consistent with the business case and the funding constraints.

ISO/IEC 15288 defines six stages of a life cycle, shown in this table. Section 0 describes the six stages.

Notes

SOURCES:
SEH 3.2 – 3.3

Notes

SOURCES:
SEH 4.1

4.1 Introduction

Source: SEH 4.1

Technical Processes: Introduction

- ISO/IEC 15288 technical processes

Enable systems engineers to coordinate the interactions between:

- engineering specialists
- systems stakeholders
- operators
- manufacturing

Lead to the creation of a full set of requirements that address:

- desired capabilities
- within the bounds of performance
- environment
- external interfaces
- design constraints

SEH chapter 4 is concerned with the Technical Processes that advance a system development from its infancy (concept) through delivery, utilization, and retirement. When considered along with its supporting information in chapters 7, 8 and the appendices, this is by far the largest SEH chapter.

Lesson Scope

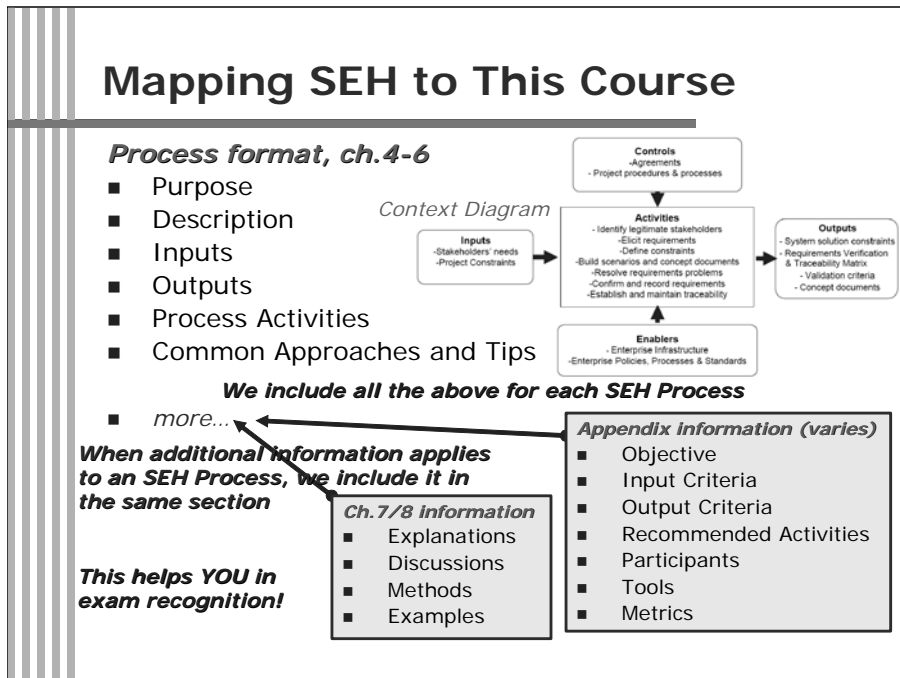
- Core material: SEH Chapter 4
- Supporting material
 - SEH App. I,J,K,N; Parts of SEH ch.7,8

| |
|---------------------------------|
| 1.0 SE HDBK SCOPE |
| 2.0 SE OVERVIEW |
| 3.0 GENERIC LIFE CYCLE STAGES |
| 4.0 TECHNICAL PROC |
| 5.0 PROJECT PROC |
| 6.0 ENTERPRISE & AGREEMENT PROC |

| |
|-------------------------------|
| 7.0 ENABLING SE PROC |
| 8.0 SE SUPPORT ACTIVITIES |
| 9.0 SPECIALTY ENGR ACTIVITIES |
| 10.0 TAILORING |

| |
|---------------------|
| A. PROCESS N2 CHART |
| B. ACRONYMS |
| C. DEFINITIONS |
| D. CONTEXT |
| E. HIERARCHY |
| F. ACQ & SUPPLY |
| G. SE TECH MGMT |
| H. IPPD |
| I. REQS DEFN |
| J. FUNCT ANLS/ALLOC |
| K. SYS ARCH SYNTH |
| L. SE ANALYSIS |
| M. HUMAN SYS INTEG |
| N. SYS INTEGR |

Notes



Lessons 4 through 6 follow closely SEH chapters 4-6, mapping each process to a segment of the lesson. Each process in SEH chapters 4-6 follows a common format that includes:

- ◆ Purpose, a short statement of the purpose of the process,
- ◆ Description, including a context diagram that shows inputs, outputs, activities, controls and enablers for the process,
- ◆ Inputs, text to expand on the inputs in the context diagram,
- ◆ Outputs, text to expand on the outputs in the context diagram,
- ◆ Process Activities, text that describes the activities and how to do them, and
- ◆ Common Approaches and Tips, bullet points that provide heuristic information proven to help on many development programs.

In this course, we follow a similar format using similar text and figures. Much of the text on our slides is drawn directly from SEH to help you recognize the exact language and key phrases used in SEH. ***Successfully passing the CSEP exam requires you to recognize the SEH language.***

When a basic process is expanded by further information in chapters 7, 8, or the appendices, our course expands the basic process by additional sections to summarize that information. In some cases, the expanded SEH information uses different language or different assumptions. Some appendices define additional processes and/or use

Notes

a different format of presentation including (in addition to the above):

- ◆ Objective, a short statement of what is accomplished
- ◆ Participants, a list of the participating groups or organizations,
- ◆ Tools, a list of useful tools and methods, and
- ◆ Metrics, a list of possible measures.

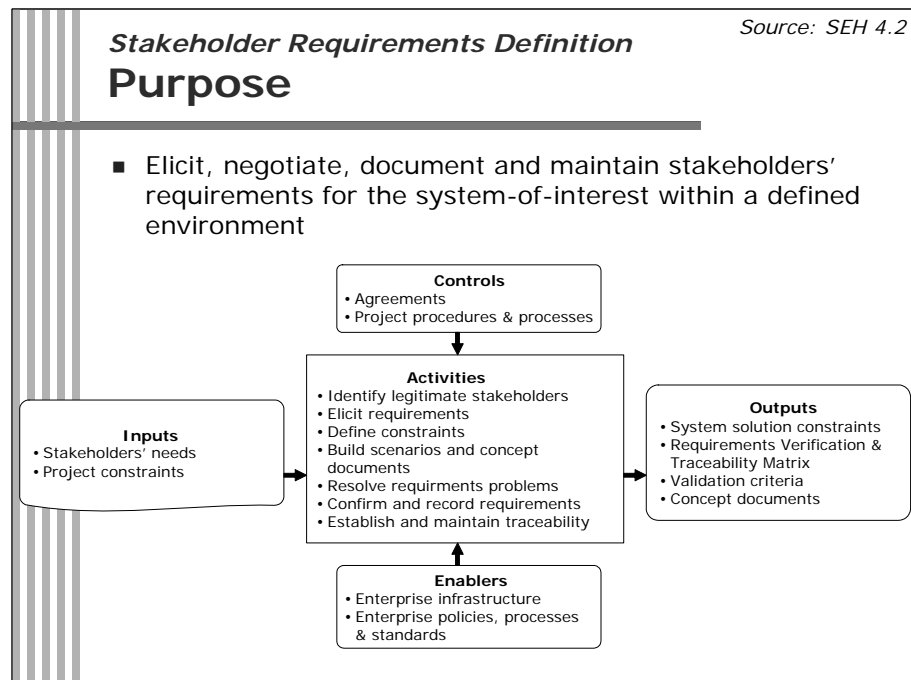
Regardless of any inconsistencies between the base document and the appendices, however, *the CSEP exam is based on the entire SEH including appendices.*

Exam questions are randomized and do not include a reference to SEH sections. Therefore, you must be able to recognize any alternate forms of SEH language relating to each topic. In this course, we group all similar topics together to help you learn and recognize the entire scope of each process.

SOURCES:
SEH 4.2, 7.2.1,
7.2.3, 7.2.4,
App.I.1, I.2

4.2 Stakeholder Requirements Definition

4.2.1 Context and Purpose



Any system development starts with defining what it is supposed to do for the users and other stakeholders.

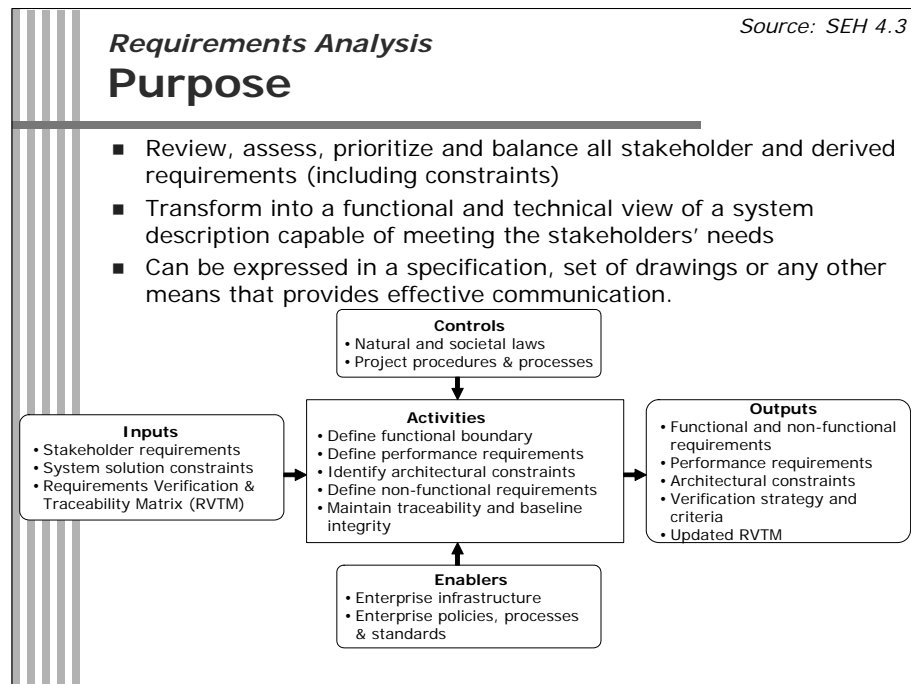
Notes

SOURCES:

SEH 4.3, 7.2.6
App.I(intro), I.3

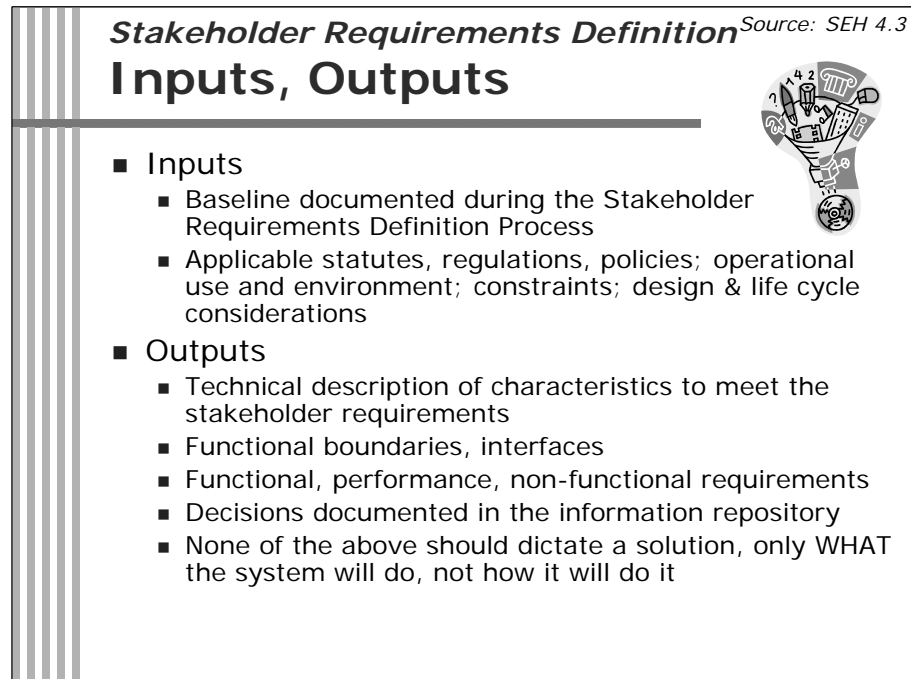
4.3 Requirements Analysis

4.3.1 Context and Purpose



The Requirements Analysis process converts the source requirements into a complete, coherent set of technical requirements statements.


4.3.2 Inputs, Outputs and Activities



Notes

Requirements Analysis Activities *Source: SEH 4.3*

- Define functional requirements
- Identify standards that must apply
- Define the system boundaries
- Define the interfaces
- Define the environmental conditions
- Define life-cycle and process requirements
- Define design considerations and constraints
- Define verification criteria
- Create traceability




Requirements Analysis firms up the technical requirements by detailed analysis and definition of the boundaries, interfaces, environment and other constraints to create functional, performance and non-functional requirements.

4.3.3 Common Approaches and Tips

Requirements Analysis Common Approaches and Tips *Source: SEH 4.3*

- Integrated Product Teams with acquirer-supplier participation to get the necessary expertise
- Use FMECA or hazard analysis to identify the critical system level requirements.
- Use specially designed requirements management tools
- Begin from the very beginning to maintain requirements traceability.
- Avoid deriving requirements that are not consistent with other requirements or constraints.
- Create templates for constructing requirements statements.



Notes

4.3.4 Creating Functional/Performance Requirements

Source: SEH App.1 (intro)

Requirements Definition Process

- Requirements form the basis for design, manufacture, test, and operations
- Each requirement carries a cost
 - It is essential that a complete, but minimum set of requirements be established early
 - Changes in requirements later in the development cycle can have a significant cost impact on the project, possibly resulting in cancellation
- Requirements analysis objectives:
 - Creates verifiable requirements that state user needs in appropriate terms to guide system concept development
 - Provides an understanding of the interactions between the various functions
 - Obtain a balanced set of requirements based on user objectives.



Requirements drive the entire project. Because requirements form the basis for all the processes and activities that follow, SE focuses on creating the best requirements available. Primary requirements are the functional requirements (what the system does) and the performance requirements (how well does it do it).

Functional/Performance Requirements

Source: SEH App.1.3
SEH 7.2.6

- At beginning, SE is concerned with user requirements – basic functions, quantifiable performance
 - Formally documented requirements that define the functions and interfaces, characterize the system
 - These requirements cover total system over its life cycle, including its support requirements
 - Primary SE activity through SRR, with significant support from design engineering
- The customer is also a key stakeholder and validates the work as it progresses.
- Complex, time consuming task involving nearly all project areas in an interactive effort
 - Done early, since it forms the basis for all design, manufacturing, test, operations, maintenance, and disposal efforts
 - Determines the cost and schedule of the project
- Process is iterative for each phase
- Addressing non-functional requirements from the earliest stages is a good way to ensure that they are not forgotten and that they are satisfied

Source: SEH App.1.3

Recommended Activities

1. Start with a set of source requirements
2. Examine mission, characterize measurable requirements
3. Detailed functional analysis to extract new functional requirements (see next slide on QFD)
4. For large systems, develop a high-level system simulation evolved from the system architecture
5. Examine any adverse consequences of incorporating requirements
6. Where existing user requirements cannot be confirmed, perform trade studies on more appropriate requirements
7. Incorporate revised/derived requirements into the requirements database; maintain traceability
8. Prepare the specification documents and submit to all organizations for review

Establishing a total set of system requirements is a complex, time consuming task involving nearly all project areas in an interactive effort. The activities to create the functional/performance requirements include functional analysis, simulation, trade studies, and others that overlap the Architectural Design process.

Notes

8.2.1 Effective Study Methods

Notes

Effective Study Methods



- Know your strengths and weaknesses
 - Take as many sample exams as you can
 - Identify your weaknesses and work specifically on them
 - Establish a study plan/schedule: topics and weeks
- Know about the exam format
 - See the next section
 - Talk with those who have taken it
 - Practice with similar types of questions
- Test yourself as you go
 - Close your eyes, ask if you remember what you've read
 - Study with someone else; ask mutual questions

If you have many years of SE experience and good test-taking ability, it may be sufficient simply to read carefully through SEH. ***Be aware that fully reading SEH takes at least two long days.*** If your experience is not so long, then you will have to return to the study practices that worked well for you in school. Use this course as a study guide and index into the related sections of SEH.

Studying the Handbook

- Read the entire INCOSE Systems Engineering Handbook
 - Read every page, in detail (*takes at least two long days!*)
 - Seek to recognize the language and the relationships
 - Set aside differences from your own knowledge
 - Cross-reference similar sections to know their differences
- Use this course as a study guide
 - Similar topics are grouped together
 - Section headers show you which SEH sections apply
 - Do topical study by reading the related SEH sections
- Write it down
 - Make topical notes
 - Physically re-write the SEH information in bullet form, to force your mind to process it



Notes

Mental Preparation

- Learn to be comfortable with your knowledge
 - Repeated self-testing, repeated checking
 - Celebrate each right answer
- Build your peace through visualization
 - Stop in the middle of study stress
 - Close your eyes, visualize a relaxing situation
 - When relaxed, imagine bringing the test into that situation; visualize comfort and success
- Choose to be positive in your speech and thoughts
 - "I can do this!"
 - Avoid negativity and negative people; "I always freeze up on tests"; "I need to pass this"; "I don't know enough"
- Physical exercise
 - A fit body helps your mind work better
 - Medical fact: sedentary people get less oxygen in the blood and to the brain
 - While studying, get 30 minutes of daily exercise



Some people also do not test well. Anxiety causes their knowledge to escape in the middle of an exam. They do not think well. It has even been shown that they do not breathe well during the exam, exhibiting shortness of breath or holding their breath for long periods. Medical tests show elevated pulse rates and blood pressure, and participants will complain of headaches, blurred vision, or other ailments.

Whether you are an extreme case of this or only mild, you too can pass this exam. Mental preparation can ease these symptoms by easing the anxiety.

Even if you test well, physical exercise is an element that is important. If you spend the week before the exam "cramming," then your lack of exercise will significantly affect your body and the way you can use it during the exam. Exercise each day in the week before the exam, and you will do better on the exam.

8.2.2 Using the Sample Exams

We provide two sample exams in the appendices of this book, with separate answer guides for each. Each exam is 60 questions and, by the rules of the CSEP exam, should complete in one hour. Each exam covers topics that span SEH.

Use the two exams separately, the first one when you have been through all SEH topics and believe that you are ready to check your strengths and weaknesses, and the second one as a final check in the days before the exam. After each sample exam, look up the references before checking the answers. (Remember, these are study tools!) Then check all your answers and study where you are weak.

Notes

8.3 Test-Taking

8.3.1 The CSEP Exam Process and Tools

CSEP Exam Process

- Physical process at Prometric
 - Arrive with your Prometric receipt and confirmation #
 - Picture ID to prove your identity
 - Empty pockets, leave everything in a Prometric locker
 - Enter exam room with only the locker key and your picture ID
- CSEP examination timing, rules
 - Tutorial on Prometric exam tools: up to 15 min
 - Examination time: up to 120 min
 - Can stop when you are complete
 - Can leave temporarily, but time continues
 - No penalty for wrong answers, so *answer every question*

Approximate mix of question formats

| | 4 choices | 5 choices | 6 choices |
|-----------|-----------|-----------|-----------|
| 1 answer | 50% | Few | |
| 2 answers | 20% | Few | |
| 3 answers | Few | 30% | Few |

Here’s what to expect at the Prometric facility when you take the exam. The pool of exam questions varies in format and yours will be selected randomly. After a generous tutorial period with the software, you will have 120 minutes. Questions appear singly on the screen.

Exam Screen Format

The screenshot shows the exam interface with the following elements:


- Question Number:** 23 of 120
- Count-down time remaining:** 91:22
- Your Name:** Certified Systems Engineering Professional
- Question Text:** During requirements analysis, requirements from a variety of sources and disciplines are analyzed to resolve conflicts. The human factors engineer is primarily responsible for which two types of requirements? (Choose two)
- Answer Choices:**
 - A. Human performance requirements
 - B. Human machine interfaces
 - C. Human habitability requirements
 - D. Human engineering design requirements
- Navigation Buttons:** Previous, Next, Mark, End
- Annotations:**
 - Arrows point from the question number and time remaining to their respective labels.
 - An arrow points from the 'Previous' button to the label 'Go to other questions'.
 - An arrow points from the 'Mark' button to the label 'Mark this question for later review'.
 - An arrow points from the 'End' button to the label 'Go to review and ending'.
 - A callout box points to the checkboxes with the text: 'Check boxes for multiple-answer questions' and 'Radio buttons for single-answer questions'.

Notes

8.3.2 Strategies for Multiple-Choice Exams

Multiple-Choice Questions

- Each question comprises
 - The stem includes the situation, context, question
 - Detractor (wrong) answers
 - Correct answer(s)
- Detractors sound logical, may use information in the stem, may be correct in another context, but don't answer this question
- Key is always to separate the correct answer(s) from the detractors



Stem → ■ What is the purpose of the Enterprise Environment Management Process?

- A. To establish the direction and infrastructure necessary for the enterprise to take on a project
- B. To establish a set of proven and effective enterprise life cycle processes
- C. To establish and maintain a set of policies and procedures at the enterprise level that support the organization's ability to acquire and supply products and services
- D. To initiate and sustain enterprise investments

Answers

- 3 detractors
- 1 correct

There is a general strategy that works for multiple-choice questions. Knowing this strategy can help keep your anxiety down and help you to find the right answer(s). The strategy starts with reading and rewording the question (the “stem”), without yet looking at the answers. Make sure you understand the question before starting to read the answers.

Evaluate the Question


- Read the stem
 - Without looking yet at the answers
- Reword the question
 - Do I understand the question?
 - “I want the reason-for-being stated in the SEH for one specific Process defined in the SEH.”
- Predict an ideal answer
 - Don't remember the exact wording, but it has to do with creating the environment and processes within which the enterprise can do its business



- What is the purpose of the Enterprise Environment Management Process?
-
-
-
-


Question 1 of 60 Sample CSEP Examination
Source: SEH 9.4

- Which of the following are among the most widely recognized human centered domains identified for consideration in the Human Systems Integration (HSI) process? (Choose three)
 - A. Human Factors Engineering
 - B. Health insurance and medical care
 - C. Manpower and personnel
 - D. Environmental continuing education
 - E. Safety and occupational health

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Question 2 of 60 Sample CSEP Examination
Source: SEH App.1.2

- Which document is a functional definition and rationale from the user and customer perspective, describing what the system will do, not how it will do it?
 - A. System Requirements Document (SRD)
 - B. Statement of Work (SOW)
 - C. Capabilities Design Document (CDD)
 - D. Concept of Operations (ConOps)

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Question 3 of 60 Sample CSEP Examination
Source: SEH 6.5.3

- What is one input of the Resource Management Process?
 - A. Enterprise training plan
 - B. History of prior resource allocations
 - C. Portfolio of active projects
 - D. Enterprise resource plans

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Question 4 of 60 Sample CSEP Examination
Source: SEH 6.6.3

- What are three inputs of the Quality Management Process? (Choose three)
 - A. Project assessments
 - B. Enterprise quality management guidelines
 - C. Quality plans from ongoing projects
 - D. Tailoring trends
 - E. Enterprise Quality Management authority

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Question 5 of 60 Sample CSEP Examination
Source: SEH 6.8.5

- What are three activities of the Supply Process? (Choose three)
 - A. Manage Supply Process activities
 - B. Negotiate agreement
 - C. Inform all personnel as to which items are in short supply
 - D. Develop and maintain Acquisition Plans, Strategies, Policies, Procedures to meet the enterprise goals and objectives and the needs of the project management and technical systems engineering organizations
 - E. Select appropriate acquirers

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Question 6 of 60 Sample CSEP Examination
Source: SEH 5.2.1

- What is the purpose of the Project Planning Process?
 - A. To establish the direction and infrastructure necessary to assess and control the progress of a project
 - B. To plan the incorporation of stakeholder needs into the project
 - C. To establish critical and desired system requirements
 - D. To capture stakeholder's requirements

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