

ISSEP - Information Systems Security Engineering Professional

Course Description & Overview

SecureNinja's CISSP-ISSEP (Information Systems Security Engineering Professional) certification training is designed for cybersecurity professionals who want to expand their expertise in engineering and integrating secure systems into complex enterprise environments. This advanced ISC2 certification focuses on applying systems engineering principles to the design and development of secure IT infrastructures.

Mapped to the current ISSEP exam domains and approved under DoD 8140 for cybersecurity engineering roles, this training helps students master the technical and analytical skills needed to build secure systems from the ground up. SecureNinja's expert instructors explain National Institute of Standards and Technology (NIST) frameworks and risk management models in clear, practical terms—making even the most technical topics accessible to learners pursuing this elite credential.

Why Choose CISSP-ISSEP

- DoD 8140 Approved: Fulfills requirements for advanced cybersecurity engineer and architect roles within U.S. government frameworks.
- Focused on Systems Security Engineering: Emphasizes secure development lifecycles, risk management, and technical security integration.
- Ideal for Government Projects: Aligns with NIST SP 800-series and RMF standards commonly used in federal security programs.
- Elite Industry Recognition: One of the most respected cybersecurity engineering certifications available globally.

Topics Covered

- Systems Security Engineering Foundations: Understanding core concepts of security engineering and life cycle models.
- Risk Management: Applying the NIST Risk Management Framework (RMF) to identify, assess, and mitigate system risks.
- Security Planning and Design: Architecting and documenting secure systems aligned with enterprise mission needs.
- System Implementation, Verification, and Validation: Ensuring systems meet security requirements through rigorous testing.
- Secure Operations, Change Management, and Disposal: Managing system security throughout operations and end-of-life transitions.

Who is it for

- Systems Security Engineers: Responsible for architecting and deploying secure solutions in complex environments.
- Information Assurance Engineers: Working on federal compliance and risk management initiatives.

- CISSP-Certified Professionals: Looking to specialize in secure engineering practices.

Who Would Benefit

- Government Contractors and Federal Employees: Supporting systems that must comply with NIST RMF, FISMA, or FedRAMP standards.
- Security Architects: Designing mission-critical and compliance-driven solutions.
- Defense Program Engineers: Working with classified or national security systems.

Prerequisites

Candidates must hold a valid CISSP certification and have at least two years of cumulative paid work experience in one or more of the five ISSEP domains.

Course Outline

1. Systems Security Engineering Foundations

- Understand the role of the security engineer in the SDLC.
- Apply secure design principles to system architecture.

2. Risk Management

- Implement the NIST RMF process.
- Analyze security risks and assign appropriate security controls.

3. Security Planning and Design

- Integrate security into system requirements and documentation.
- Align system security with organizational mission objectives.

4. System Implementation, Verification, and Validation

- Conduct secure system testing and validation procedures.
- Confirm that implemented systems meet defined security criteria.

5. Secure Operations, Change Management, and Disposal

- Monitor and assess operational systems for security compliance.
- Securely manage system updates, transitions, and disposal.

Course Length

- 4 Days
- 32 Hours

Exam Details

- Certification: CISSP-ISSEP (Information Systems Security Engineering Professional)
- Exam Format: Multiple choice

- Number of Questions: 125
- Duration: 3 hours
- Passing Score: 700 out of 1000

The CISSP-ISSEP is a premier credential for systems security engineers who architect and maintain secure systems in accordance with government, military, and industry compliance standards. SecureNinja's training ensures students are fully prepared to pass the ISSEP exam and excel in high-security engineering environments.