# Certified Information Systems Security Professional (CISSP)

**COURSE OVERVIEW:**

Certified Information Systems Security Professional (CISSP) Certification was designed to recognize mastery of an international standard for information security and understanding of a Common Body of Knowledge (CBK). The certification is managed by the International Information Systems Security Certification Consortium (ISC)², to recognize individuals who have distinguished themselves as experienced, knowledgeable, and proficient information security practitioners. Certification can enhance a professional's career and provide added credibility. CISSP is an approved certification for certain job classifications identified within DoD Directive 8570.

This test preparation course covers the 8 domains of the CISSP CBK relevant to the corresponding professional certification exam:

- Security and Risk Management
- Asset Security
- Security Engineering
- Communications and Network Security
- Identity and Access Management
- Security Assessment and Testing
- Security Operations
- Software Development Security

The course is specifically designed to maximize the prospect of passing the rigorous examination. Coverage includes all relevant exam topics, prioritization of areas where study should be focused, test taking strategies, and practice exam questions.

**WHO WILL BENEFIT FROM THIS COURSE?**

For IT security professionals with at least four years of work experience in the information security field.

**PREREQUISITES:**

CompTIA Security+ Certification Preparation course, certification, or equivalent experience is recommended.

**COURSE OBJECTIVES:**

- Understand and apply concepts of confidentiality, integrity and availability
- Evaluate and apply security governance principles
- Determine compliance requirements
- Understand legal and regulatory issues that pertain to information security in a global
- context
- Understand, adhere to, and promote professional ethics
- Develop, document, and implement security policy, standards, procedures, and guidelines
- Identify, analyze, and prioritize Business Continuity (BC) requirements
- Contribute to and enforce personnel security policies and procedures
- Understand and apply risk management concepts
- Understand and apply threat modeling concepts and methodologies
- Apply risk-based management concepts to the supply chain

- Establish and maintain a security awareness, education, and training program
- Identify and classify information and assets
- Determine and maintain information and asset ownership
- Protect privacy
- Ensure appropriate asset retention
- Determine data security controls
- Establish information and asset handling requirements
- Implement and manage engineering processes using secure design principles
- Understand the fundamental concepts of security models
- Select controls based upon systems security requirements
- Understand security capabilities of information systems (e.g., memory protection, Trusted
- Platform Module (TPM), encryption/decryption)
- Assess and mitigate the vulnerabilities of security architectures, designs, and solution
- elements
- Assess and mitigate vulnerabilities in web-based systems
- Assess and mitigate vulnerabilities in mobile systems
- Assess and mitigate vulnerabilities in embedded devices
- Apply cryptography
- Apply security principles to site and facility design
- Implement site and facility security controls
- Implement secure design principles in network architectures
- Secure network components
- Implement secure communication channels according to design
- Control physical and logical access to assets
- Manage identification and authentication of people, devices, and services
- Integrate identity as a third-party service
- Implement and manage authorization mechanisms
- Manage the identity and access provisioning lifecycle
- Design and validate assessment, test, and audit strategies
- Conduct security control testing
- Collect security process data (e.g., technical and administrative)
- Analyze test output and generate report
- Conduct or facilitate security audits
- Understand and support investigations
- Understand requirements for investigation types
- Conduct logging and monitoring activities
- Securely provisioning resources
- Understand and apply foundational security operations concepts
- Apply resource protection techniques
- Conduct incident management
- Operate and maintain detective and preventative measures
- Implement and support patch and vulnerability management
- Understand and participate in change management processes
- Implement recovery strategies
- Implement Disaster Recovery (DR) processes
- Test Disaster Recovery Plans (DRP)
- Participate in Business Continuity (BC) planning and exercises

- Implement and manage physical security
- Address personnel safety and security concerns
- Understand and integrate security in the Software Development Life Cycle (SDLC)
- Identify and apply security controls in development environments
- Assess the effectiveness of software security
- Assess security impact of acquired software
- Define and apply secure coding guidelines and standards

**COURSE OUTLINE:**

**Lesson 1: Information Systems Access Control**

- Data Access Principles
- System Access and Authentication
- Penetration Tests

**Lesson 2: Security Architecture and Design**

- Security Models
- Security Modes
- System Assurance

**Lesson 3: Network and Telecommunications Security**

- Data Network Design
- Remote Data Access
- Data Network Security
- Data Network Management

**Lesson 4: Information Security Management Goals**

- Organizational Security
- The Application of Security Concepts

**Lesson 5: Information Security Classification and Program Development**

- Information Classification
- Security Program Development

**Lesson 6: Risk Management and Ethics**

- Risk Management
- Ethics

**Lesson 7: Application Security**

- Software Configuration Management
- Software Controls
- Database System Security

**Lesson 8: Cryptography**

- Ciphers and Cryptography
- Symmetric-Key Cryptography
- Asymmetric-Key Cryptography
- Hashing and Message Digests
- Email, Internet, and Wireless Security
- Cryptographic Weaknesses

### Lesson 9: Physical Security

- Physical Access Control
- Physical Access Monitoring
- Physical Security Methods
- Facilities Security

### Lesson 10: Operations Security

- Operations Security Control
- Operations Security Auditing and Monitoring
- Operational Threats and Violations

### Lesson 11: Business Continuity and Disaster Recovery Planning

- Business Continuity Plan Fundamentals
- Business Continuity Plan Implementation
- Disaster Recovery Plan Fundamentals
- Disaster Recovery Plan Implementation

### Lesson 12: Legal, Regulations, Compliance, and Investigations

- Computer Crime Laws and Regulations
- Computer Crime Incident Response

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What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system.  No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

**Premiere World Class Instruction Team**

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

**Enhanced Learning Experience**

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

**Convenient and Reliable Training Experience**

- You have the option to attend classes at any of our established training facilities or from the convenience of your home or office with the use of our HD-ILT network (High Definition Instructor Led Training)
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

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- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience