

# Certified Information Systems Security Professional (CISSP®): Fourth Edition

**Course Specifications** 

Course Length:

5 days

# **Course Description**

#### Overview:

Welcome to Certified Information Systems Security Professional (CISSP)®: Fourth Edition. With your completion of the prerequisites and necessary years of experience, you are firmly grounded in the knowledge requirements of today's security professional. This course will expand upon your knowledge by addressing the essential elements of the eight domains that comprise a Common Body of Knowledge (CBK)® for information systems security professionals. The course offers a jobrelated approach to the security process, while providing a framework to prepare for CISSP certification.

CISSP is the premier certification for today's information systems security professional. It remains the premier certification because the sponsoring organization, the International Information Systems Security Certification Consortium, Inc. (ISC)2 ®, regularly updates the test by using subject matter experts (SMEs) to make sure the material and the questions are relevant in today's security environment. By defining eight security domains that comprise a CBK, industry standards for the information systems security professional have been established. The skills and knowledge you gain in this course will help you master the eight CISSP domains and ensure your credibility and success within the information systems security field.



#### Course Objectives:

In this course, you will identify and reinforce the major security subjects from the eight domains of the (ISC)2 CISSP CBK.

You will:

- Analyze components of the Security and Risk Management domain.
- Analyze components of the Asset Security domain.
- Analyze components of the Security Engineering domain.
- Analyze components of the Communications and Network Security domain.
- Analyze components of the Identity and Access Management domain.
- Analyze components of the Security Assessment and Testing domain.
- Analyze components of the Security Operations domain.
- Analyze components of the Software Development Security domain.

#### Target Student:

This course is intended for experienced IT security-related practitioners, auditors, consultants, investigators, or instructors, including network or security analysts and engineers, network administrators, information security specialists, and risk management professionals, who are pursuing CISSP training and certification to acquire the credibility and mobility to advance within their current computer security careers or to migrate to a related career. Through the study of all eight CISSP Common Body of Knowledge (CBK) domains, students will validate their knowledge by meeting the necessary preparation requirements to qualify to sit for the CISSP certification exam. Additional CISSP certification requirements include a minimum of five years of direct professional work experience in two or more fields related to the eight CBK security domains, or a college degree and four years of experience.

#### Prerequisites:

It is highly recommended that students have certifications in Network+ or Security+, or possess equivalent professional experience upon entering CISSP training. It will be beneficial if students have one or more of the following security-related or technology-related certifications or equivalent industry experience: CyberSec First Responder (CFR), MCSE, CCNP, RHCE, LCE, SSCP®, GIAC, CISA™, or CISM®.



### Course Content

Lesson 1: Security and Risk Management

Topic A: Security Governance Principles

Topic B: Compliance

Topic C: Professional Ethics

Topic D: Security Documentation

Topic E: Risk Management

Topic F: Threat Modeling

Topic G: Business Continuity Plan Fundamentals

Topic H: Acquisition Strategy and Practice

Topic I: Personnel Security Policies

Topic J: Security Awareness and Training

#### Lesson 2: Asset Security

Topic A: Asset Classification

Topic B: Privacy Protection

Topic C: Asset Retention

Topic D: Data Security Controls

Topic E: Secure Data Handling

#### Lesson 3: Security Engineering

Topic A: Security in the Engineering Lifecycle

Topic B: System Component Security

Topic C: Security Models

Topic D: Controls and Countermeasures in Enterprise Security

Topic E: Information System Security Capabilities

Topic F: Design and Architecture Vulnerability Mitigation

Topic G: Vulnerability Mitigation in Embedded, Mobile, and Web-Based Systems

Topic H: Cryptography Concepts

Topic I: Cryptography Techniques

Topic J: Site and Facility Design for Physical Security

Topic K: Physical Security Implementation in Sites and Facilities



# Lesson 4: Communications and Network Security Topic A: Network Protocol Security

Topic B: Network Components Security
Topic C: Communication Channel Security

Topic D: Network Attack Mitigation

#### Lesson 5: Identity and Access Management

Topic A: Physical and Logical Access Control

Topic B: Identification, Authentication, and Authorization

Topic C: Identity as a Service

Topic D: Authorization Mechanisms

Topic E: Access Control Attack Mitigation

## Lesson 6: Security Assessment and Testing

Topic A: System Security Control Testing

Topic B: Software Security Control Testing

Topic C: Security Process Data Collection

Topic D: Audits

#### Lesson 7: Security Operations

Topic A: Security Operations Concepts

Topic B: Physical Security

Topic C: Personnel Security

Topic D: Logging and Monitoring

Topic E: Preventative Measures

Topic F: Resource Provisioning and Protection

Topic G: Patch and Vulnerability Management

Topic H: Change Management

Topic I: Incident Response

Topic J: Investigations

Topic K: Disaster Recovery Planning

Topic L: Disaster Recovery Strategies

Topic M: Disaster Recovery Implementation



Lesson 8: Software Development Security

Topic A: Security Principles in the System Lifecycle

Topic B: Security Principles in the Software Development Lifecycle

Topic C: Database Security in Software Development

Topic D: Security Controls in the Development Environment

Topic E: Software Security Effectiveness Assessment