



# (ISC)<sup>2</sup> CISSP Certification



Certified Information Systems Security Professional

#### **Domain 1: Security and Risk Management**

- Understand, adhere to, and promote professional ethics
- Understand and apply security concepts
- Evaluate and apply security governance principles
- Determine compliance and other requirements
- Understand legal and regulatory issues that pertain to information security in a holistic context
- Understand requirements for investigation types (i.e., administrative, criminal, civil, regulatory, industry standards)
- 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 Supply Chain Risk Management (SCRM) concepts
- Establish and maintain a security awareness, education, and training program





## **Domain 2: Asset Security**

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- Identify and classify information and assets
- Establish information and asset handling requirements
- Provision resources securely
- Manage data lifecycle
- Ensure appropriate asset retention (e.g., End-of-Life (EOL), End-of-Support (EOS))
- Determine data security controls and compliance requirements

#### **Domain 3: Security Architecture and Engineering**

- Research, implement and manage engineering processes using secure design principles
- Understand the fundamental concepts of security models (e.g., Biba, Star Model, Bell-LaPadula)
- Select controls based upon systems security requirements
- Understand security capabilities of Information Systems (IS) (e.g., memory protection, Trusted Platform Module (TPM), encryption/decryption)
- Assess and mitigate the vulnerabilities of security architectures, designs, and solution elements
- Select and determine cryptographic solutions
- Understand methods of cryptanalytic attacks
- Apply security principles to site and facility design
- Design site and facility security controls

**ASM Educational Center (ASM)** 



### **Domain 4: Communication and Network Security**

- Assess and implement secure design principles in network architectures
- Secure network components

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• Implement secure communication channels according to design

#### **Domain 5: Identity and Access Management (IAM)**

- Control physical and logical access to assets
- Manage identification and authentication of people, devices, and services
- Federated identity with a third-party service
- Implement and manage authorization mechanisms
- Manage the identity and access provisioning lifecycle
- Implement authentication systems

#### **Domain 6: Security Assessment and Testing**

- 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



# **Domain 7: Security Operations**

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- Understand and comply with investigations
- Conduct logging and monitoring activities
- Perform Configuration Management (CM) (e.g., provisioning, baselining, automation)
- Apply foundational security operations concepts
- Apply resource protection
- 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

#### **Domain 8: Software Development Security**

- Understand and integrate security in the Software Development Life Cycle (SDLC)
- Identify and apply security controls in software development ecosystems
- Assess the effectiveness of software security
- Assess security impact of acquired software
- Define and apply secure coding guidelines and standards