# **Course Outline**

Domain 1: Security and Risk Management Lesson A: Security Governance Principles Lesson B: Security Roles & Responsibilities Lesson B: Protection Mechanism Lesson C: Risk Management Lesson C: Risk Management Lesson D: Threat Modeling Lesson E: Laws Lesson F: Intellectual property Lesson G: Business Continuity Plan Fundamentals Lesson H: Personnel Security Policies Lesson I: Security Awareness and Training

## **Domain 2: Asset Security**

Lesson A: Asset Classification Lesson B: Identify data roles Lesson C: Privacy Protection Lesson D: Asset Retention Lesson E: Data Security Controls Lesson F: Secure Data Handling

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

Lesson A: Security in the Engineering Lifecycle Lesson B: System Component Security Lesson C: Security Models, Design, Architecture Lesson D: Information System Security Capabilities Lesson E: Design and Architecture Vulnerability Mitigation Lesson F: Cryptography Concepts Lesson G: Cryptography Techniques Lesson H: Applied Cryptography Lesson I: Site and Facility Design for Physical Security Lesson J: Physical Security Implementation in Sites and Facilities

Domain 4: Communication and Network Security Lesson A: Network Protocol & Layer Lesson B: Network Components Security Lesson C: Communication Channel Security Lesson D: Network Attack & Mitigation

#### **Domain 5: Identity and Access Management**

Lesson A: Identification, Authentication, and Authorization Lesson B: Physical and Logical Access Control Lesson C: Identity as a Service Lesson D: Authorization Mechanisms Lesson E: Access Control Attack Mitigation

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

Lesson A: System Security Control Testing Lesson B: Software Security Control Testing Lesson C: Security Process Data Collection Lesson D: Audits

## **Domain 7: Security Operations**

Lesson A: Security Operations Concepts Lesson B: Physical Security Lesson C: Personnel Security Lesson D: Logging and Monitoring Lesson E: Preventative Measures Lesson F: Resource Provisioning and Protection Lesson G: Patch and Vulnerability Management Lesson H: Change Management Lesson I: Incident Response Lesson J: Investigations Lesson K: Disaster Recovery Planning Lesson L: Disaster Recovery Strategies Lesson M: Disaster Recovery Implementation

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

Lesson A: Security Principles in the System Lifecycle Lesson B: Security Principles in the Software Development Lifecycle Lesson C: Database Security in Software Development Lesson D: Security Controls in the Development Environment Lesson E: Software Security Effectiveness Assessment