Certificate of Cloud Security Knowledge (CCSK) Contents

1. Cloud computing concepts and Architectures

- Defining Cloud Computing
- Definitional Model
- Reference and Architecture Models
- Logical Model
- Cloud Security Scope, Responsibilities, and Models

2. Governance and Enterprise Risk Management

- Tools of Cloud Governance
- Enterprise Risk Management
- The Effects of Service Model and Deployment Model
- Cloud Risk Management Tools

3.Legal issues, Contracts and Electronic Discovery

- Legal Frameworks Governing Data Protection and Privacy
- Restrictions to Cross-border Data Transfers
- Regional Examples
- EUROPEAN UNION
- AND EUROPEAN
- ECONOMIC AREA
- General Data Protection Regulation (GDPR)
- Contracts and Provider Selection
- Internal Due Diligence
- Monitoring, Testing, and Updating
- External Due Diligence
- Reliance on Third-Party Audits and Attestations
- Electronic Discovery
- Searchability and E-Discovery Tools
- Data Retention Laws and Record Keeping Obligations

4. Compliance and Audit Management

- How Cloud Changes Compliance
- Audit Management
- How Cloud Changes Audit Management

5.Information Governance

- Cloud Information Governance Domains
- The Data Security Lifecycle
- Locations and Entitlements
- Functions, Actors, and Controls

6. Management Plane and Business Continuity

- Business Continuity and Disaster Recovery in the Cloud
- Architect for Failure
- Management Plane Security
- Securing the Management Plane
- Business Continuity Within the Cloud Provider

7.Infrastructure Security

- Cloud Network Virtualization
- Challenges of Virtual Appliances
- SDN Security Benefits
- Microsegmentation and the Software Defined Perimeter
- Immutable Workloads

8. Virtualization and Containers

- Cloud Provider Responsibilities
- Cloud User Responsibilities
- Management Infrastructure

9.Incident Response

- Incident Response Lifecycle
- How the Cloud Impacts IR

10. Application Security

- Introduction to the Secure Software Development Lifecycle and
- Cloud Computing
- Impact on Vulnerability Assessment
- Impact on Penetration Testing

11. Data Security and Encryption

- Cloud Data Storage Types
- Managing Data Migrations to the Cloud
- Securing Data in the Cloud

12. Identity, Entitlement and Access Management

- IAM Standards for Cloud Computing
- 13. Security as a service
- 14.Related Technologies