

Cybersecurity Analysis Course Structure

Module 1 - Introduction to Cybersecurity Analysis

- 1.1 Course Overview
- 1.2 Importance of Security
- 1.3 IT Functions & Roles
- 1.4 IT 101 1: The Pieces
- 1.5 IT 101 2: Using & Managing the Pieces
- 1.6 IT 101 3: Advancement
- 1.7 The Role of Business Analysis in Cybersecurity
- 1.8 Governance Perspectives of Cybersecurity

Module 2 - Enterprise Cybersecurity Concepts

- 2.1 Security Accountability
- 2.2 Cost of Securing an Organization
- 2.3 Outsourcing for Cybersecurity Expertise & Services
- 2.4 Risk Tolerance
- 2.5 Compliance
- 2.6 Best Practices & Benchmarking
- 2.7 Data Privacy 1: Basics
- 2.8 Data Privacy 2: Nuances
- 2.9 Digital Rights Management
- 2.10 Audit: Internal & External

Module 3 - Enterprise Risk

- 3.1 Risk Management & Control Assurance Framework
- 3.2 Organizational Risk Assessment
- 3.3 Risk Analysis: Threat Risk Assessments

- 3.4 Risk Analysis: Vulnerability Assessments
- 3.5 Business Case Development
- 3.6 Disaster Recovery & Business Continuity

Module 4 - Cybersecurity Risks and Controls

- 4.1 Understanding Security Controls & IT RIsk -1
- 4.2 Understanding Security Controls -2
- 4.3 CIA Triad
- 4.4 Applying Controls
- 4.5 Cybersecurity Threats 1
- 4.6 Cybersecurity Threats 2
- 4.7 Cybersecurity Vulnerabilities 1
- 4.8 Cybersecurity Vulnerabilities 2
- 4.9 Adverse Impacts
- 4.10 Risks & Controls: Putting it all Together

Module 5 - Securing the Layers

- 5.1 Physical Security
- 5.2 Endpoint Security
- 5.3 Network Security: Security Architecture
- 5.4 Network Security: Firewalls
- 5.5 Network Security: Anti-Virus/Anti-Malware
- 5.6 Network Security: Segregation
- 5.7 System Security: Servers
- 5.8 Platform Security
- 5.9 Product Security: Threat Models
- 5.10 Product Security: Embedded Systems
- 5.11 Product Security: Internet of Things

Module 6 - Data Security

- 6.1 Data Security At Rest: Information Classification & Categorization
- 6.2 Data Security In Transit: Encryption & Keys
- 6.3 Data Security In Transit: SSL/TLS

6.4 Data Security - In Transit: Digital Signature & Identification

Module 7 - User Access Control

- 7.1 Directory Management
- 7.2 Authorization
- 7.3 Authentication and Access Control
- 7.4 Privileged Account Management
- 7.5 Users and Security Awareness

Module 8 - Solution Delivery

- 8.1 SDLC & Solution Security Planning
- 8.2 Requirements & Security Engineering
- 8.3 Requirements & Solution Development
- 8.4 Solution Security: Applications
- 8.5 Solution Security: Databases
- 8.6 Solution Security: Web
- 8.7 Change Impact Analysis

Module 9 - Operations

- 9.1 Incident Response, Recovery & Remediation
- 9.2 Metrics & Reporting
- 9.3 Risk Logging & Mitigation Tracking
- 9.4 Operational Risk Ownership
- 9.5 Computer Forensics: SOC, SIEM
- 9.6 Future Proofing your Security Posture

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