

Technology Audit Foundation

Course Outline

Module 1: IT Audit Process and IT Governance Framework

1. IT Audit Process
 - 1.1 IT Audit Strategy and Planning
 - 1.2 IT Audit Standards
 - 1.3 Stakeholder Communication
 - 1.4 Continuous ImprovementCase Study 1
2. IT Governance
 - 2.1 IT Strategy and Business Alignment
 - 2.2 IT Governance and Organisation
 - 2.3 IT Policies, Procedures and Standards
 - 2.4 IT Resource Management/Investment Prioritisation
 - 2.5 IT Portfolio Management
 - 2.6 IT Risk Management
 - 2.7 IT Continuous MonitoringCase Study 2

Module 2 : Protection of Information Assets

1. Foundation of IT
 - 1.1 OSI – 7 layers
2. Motivations and challenges behind securing information assets
3. Cybersecurity foundations
 - 3.1 Introduction to Cryptography & Applications
 - 3.2 Encryption and Hashing
 - 3.3 PKI
 - 3.4 SSL/TLS
 - 3.5 Web applications security
4. Access Control
 - 4.1 Authentication, Authorization and Accounting
 - 4.2 Multi-factor authenticationCase study 2

Module 3: IT Infrastructure

1. Motivations and challenges behind network and systems security
2. Introduction to network security
 - 2.1 Challenges in securing networks
 - 2.2 LAN security, including firewalls, routers etc
3. Introduction to systems security
 - 3.1 OS security, including configuration and patch management
 - 3.2 Security baselines
 - 3.3 Cloud security

Module 4: IT Resilience & Emerging Technologies

1. Monitoring and response introduction
 - 1.1. Disaster Recovery Planning, including Incident Response Management
 - 1.2. Business Continuity Planning
 - 1.3. IT Service Management
2. Mobile security introduction
 - 2.1. BYOD
 - 2.2. Mobile security policies
3. Emerging technologies overview
 - 3.1. IoT
 - 3.2. 5G
 - 3.3. AI
 - 3.4. RPA
 - 3.5. Blockchain
 - 3.6. Drones