

Information Security Essentials:

Enhance your ability to advise on information security decisions

Course Schedule – Topics & Activities

Day One

- Information security management overview
 - Organizational policy, roles, & responsibilities
 - Privacy concepts & requirements
 - Information classification
 - Risk management & analysis
 - Common computer architecture
 - Enterprise security architecture
 - Information security models
- Access to systems
 - Authentication types
 - Access control services
 - Identity management
- Access to data
 - ACLs
 - Rule-based & role-based access controls
 - Capability tables
- Information security monitoring
 - IPS / IDS
 - Audit trail monitoring
 - Audit event types
- Application security
 - DBMS overview
 - Online transaction processing
 - Data warehousing
 - Application environment threats
 - Software development methods
 - Software protection mechanisms
 - System development life cycle

Day Two

- Operations security
 - Secure operations controls
 - Information protection environment
- Cryptography
 - Methods of encryption
 - Symmetric & asymmetric key cryptography
 - Data encryption standard
 - Digital signatures
 - Certification
 - Public key infrastructure
 - E-mail security
 - Internet security using encryption
- Physical security
 - Physical controls goals
 - Physical security threats
 - Crime prevention through environmental design

Day Three

- Layered defense model
 - Boundary protection
 - Perimeter intrusion detection systems
 - Controls used inside the building
- Business continuity planning
 - Business continuity planning overview
 - Phases of business continuity planning
 - Restoration actions
- Data network overview
 - Network architectures
 - Data network components
 - Data network technologies
- Network protocols
 - OSI network model
 - TCP/IP network protocol
 - Network protocol vulnerabilities
- Network access
 - Authentication protocols
 - User authentication
 - Firewall & perimeter security approaches

Day Four

- Remote access
 - Remote access control techniques
 - Remote access protocols
 - VPNs
 - Telephony
 - Components
 - Vulnerabilities
 - IP telephony
- Wireless networks
 - Wireless network components
 - Wireless protocols
 - Wireless threats & vulnerabilities
 - Wireless controls components
- Vulnerability management
 - Vulnerability life cycle
 - Penetration testing
 - Vulnerability management testing strategies
- Virtualization
 - Types of virtualizations
 - Benefits
 - Issues & risks
 - Protection

*Topics and activities may vary by class and instructor.