# **Information Security Management**

#### I. Introduction

Enterprise
Business Systems
Data, Information, Knowledge
Information Systems
Process-based Organization
Documentation
Standards and Procedures
ISO 9000 Certification

## **II.** Threats to Modern Organization

Information Age
Internet, Intranet, Extranet
Network-based Organization
E-Business and E-Commerce
Business Recovery and Continuity Panning
EDI - What is it and how it works?
Information Security

#### **III.** Cyber Crime

What is it? Investigating Computer -related Crime Threat Categories Profiles Information Gathering Techniques Impersonation/Spoofing Social Engineering

Computer Virus

Avenues of Attack

Vulnerabilities

General Hacking

Denial of Service

Hybrid Attacks

Piracy and Digital Rights Management

Noteworthy Organizations and Response Teams

Web-site Hacking

Physical Threats

### IV. Methodologies, Techniques, and Tools for Providing a Secure Business Environment

Security Architectures and Models Access Control Systems and Methodology Design and Develop Secure Systems Secure Internet Practices Securing E-Business Applications

#### V. Implement and Manage Network-based Controls

**Networks Technologies** 

- OSI and ISDN Protocols
- ATM, Frame-Relay, TCP/IP
- Remote Access
- Network Monitoring

Telecommunications and Network Security

Use of Cryptography to Secure Communications and Control EDI Transactions

Applications and Systems Development Security

IPSec Virtual Private Networks

#### **VI.** Security Management Practices

Information Security Management
Measure the Impact of both Accidental and Malicious Intrusions
Five Components of a Comprehensive and Effective Program
Information Assurance and Integrity Levels
Building and Information Security Awareness Program

## VII. Operations Security

User Verification and Automated Intrusion Detection
Penetration Testing
Secure Voice Communications
Enforcing Information Security Policies, Standards and Procedures (ISO 17799)
Physical Security

# VIII. Business Continuity Planning and Disaster Recovery Planning

Law, Investigations and Ethics

Analyzing Risk and Disasters

Building, Maintaining, and Updating a Business Continuity Plan

How to Recover Vital Records

How to Deal with Emotional Trauma after a Disaster

Planning and Crisis management and Operations, Data Center, and Communications Recovery