MINISTRY OF COMMUNICATIONS AND MULTIMEDIA MALAYSIA

CyberGuru
CYBER SECURITY PROFESSIONAL DEVELOPMENT

CyberSecurity MALAYSIA

CRYPTOGRAPHY FOR INFORMATION SECURITY PROFESSIONAL

Level: Intermediate | **Duration:** 3 days

Information technology and security networks demand complex algorithms and cryptographic systems. This course covers cryptographic components such as policy, cryptography implementation, key management and security issues.

Objectives

1. Identify accurate cryptography solutions for organization
2. Advise organization on cryptography's risk, vulnerabilities and security issues

Target Participants

1. Individuals with Information Security qualifications

Modules

Day 1:
Introduction Cryptography and Security Mechanism

1. **Introduction**
2. **Classical Cryptography**
3. **Symmetric Algorithm**
   - Block Cipher
   - Stream Cipher
4. **Asymmetric Algorithm**
5. **Cryptanalysis**

Day 2:
Public Key Infrastructures and Cryptographic Key Management

6. **Public Key Infrastructure (PKI)**
   - Introduction to Certificate
   - Certificate Process
7. **Introduction to Key Management**
   - Introduction
   - Key Management
8. **Hashing/Checksum**
   - Unkeyed Cryptosystems
   - Secret-Key Cryptosystems
9. **Digital Signature**

Day 3:
Cryptographic Services

10. **Security Services**
    - Authentication Services
    - Access Control Services
    - Data Integrity Services
    - Non-repudiation Services
11. **Specific Security Mechanisms**
    - Digital Signature Mechanisms
    - Access Control Mechanisms
    - Data Integrity Mechanisms
12. **Entity Authentication**
13. **Attacks**
14. **PGP**
15. **Secure Email**
16. **Data Encryption**

For additional information, please visit www.cyberguru.my. You can also contact us at training@cybersecurity.my or call at 03 8800 7999

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