

CRYPTOGRAPHY FOR BEGINNERS

Level: Fundamental | **Duration:** 1 day

This course is designed specifically to create understanding on basics of cryptography and presenting main ideas in simple language. It highlights Important components such as Stream Cipher, block ciphers, public key algorithms, digital signatures, and applications as well as a historical look at the field.

Objectives

1. Understanding cryptography
2. Learn why, where and when to apply the cryptography

Target Participants

1. Computer users who are new to cryptography

Modules

1. Introduction of Cryptography

- Terminology
- Who uses cryptography
- Why we need cryptography

2. History of Cryptography

- Manual Era
- Machine Era
- Modern Era

3. Classical Cryptography

- Substitution
- Transposition

4. Cryptographic Algorithm

- Symmetric Cryptosystem
 - Block Cipher
 - Stream Cipher
- Asymmetric Cryptosystem

5. Hashing and Checksum

6. Public Key Infrastructure (PKI)

- Introduction to Certificate
- Certification Process

7. Digital Signature

- Digital Signature Overview
- Hash Function

8. Cryptanalysis

- Introduction
- Type of Cryptanalysis Attacks

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