

# EC-Council Certified Encryption Specialist (E|CES) + Exam voucher

### Overview:

The EC-Council Certified Encryption Specialist (ECES) program introduces professionals and students to the field of cryptography. The participants will learn the foundations of modern symmetric and key cryptography including the details of algorithms such as Feistel Networks, DES, and AES. Other topics introduced:

Overview of other algorithms such as Blowfish, Twofish, and Skipjack

Hashing algorithms including MD5, MD6, SHA, Gost, RIPMD 256 and others.

Asymmetric cryptography including thorough descriptions of RSA, Elgamal, Elliptic Curve, and DSA.

Significant concepts such as diffusion, confusion, and Kerkchoff's principle.

Participants will also be provided a practical application of the following:

How to set up a VPN

Encrypt a drive

Hands-on experience with steganography

Hands on experience in cryptographic algorithms ranging from classic ciphers like Caesar cipher to modern day algorithms such as AES and RSA.

#### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

### **Target Audience:**

Anyone involved in the selection and implementation of VPN's or digital certificates should attend this course. Without understanding the cryptography at some depth, people are limited to following marketing hype. Understanding the actual cryptography allows you to know which one to select. A person successfully completing this course will be able to select the encryption standard that is most beneficial to their organization and understand how to effectively deploy that technology.

This course is excellent for ethical hackers and penetration testing professionals as most penetration testing courses skip cryptanalysis completely. Many penetration testing professionals testing usually don't attempt to crack cryptography. A basic knowledge of cryptanalysis is very beneficial to any penetration testing.

## Objectives:

What is Crypto	graphy?
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History

Mono-Alphabet Substitution

Caesar Cipher

Atbash Cipher

ROT 13

Scytale

Single Substitution Weaknesses

Multi-Alphabet Substitution

Cipher Disk

Vigenère Cipher

■ Vigenère Cipher: Example

Breaking the Vigenère Cipher

Playfair

The ADFGVX cipher

The Enigma Machine

CrypTool

Testing and Certification

### Content:

Types of Encryption Standards and their differences

How to select the best standard for your organization

How to enhance your pen-testing knowledge in encryption

Correct and incorrect deployment of encryption technologies

Common mistakes made in implementing encryption technologies

Best practices when implementing encryption technologies

### Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931 <a href="mailto:info@globalknowledge.co.uk">info@globalknowledge.co.uk</a>

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK