

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

Duration: 3 Days    Course Code: ECES    Delivery Method: Virtual Learning

### 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.

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

### 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 Cryptography?
- 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

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## Content:

Types of Encryption Standards and their differences

How to enhance your pen-testing knowledge in encryption

Common mistakes made in implementing encryption technologies

How to select the best standard for your organization

Correct and incorrect deployment of encryption technologies

Best practices when implementing encryption technologies

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

[info@globalknowledge.co.uk](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.com/en-gb/](http://www.globalknowledge.com/en-gb/)

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