

EC-Council Certified Encryption Specialist (ECES) Training

EC-Council Authorized Training · Applied Technology Academy

The Certified Encryption Specialist (E|CES) program is designed to introduce students to the field of cryptography — the practice and study of techniques for secure communication in the presence of adversarial behavior. This program delves into modern symmetric key cryptography, with detailed insights into Feistel Networks, Data Encryption Standard (DES), and Advanced Encryption Standard (AES) algorithms. When students complete this program, they are able to implement encryption techniques for their organizations, secure data with VPNs and more, making them valuable assets in cybersecurity.

LEVEL Beginner	DURATION 3 Days	EXPERIENCE None (no prior cryptography assumed)	AVERAGE SALARY \$64,393	LABS No
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Course Overview

The EC-Council Certified Encryption Specialist (E|CES) 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, RIPEMD 256 and others
- Asymmetric cryptography including thorough descriptions of RSA, Elgamal, Elliptic Curve, and DSA
- Significant concepts such as diffusion, confusion, and Kerckhoff's principle

Course Outline

- **Module 01: Introduction and History of Cryptography**
- **Module 02: Symmetric Cryptography and Hashes**
- **Module 03: Number Theory and Asymmetric Cryptography**
- **Module 04: Applications of Cryptography**
- **Module 05: Cryptanalysis**

Intended Audience

Anyone involved in selecting, implementing VPN's or digital certificates should attend this course first. 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.

Prerequisites

No prior knowledge of cryptography is assumed, and no mathematical skills beyond basic algebra are required.

Follow-On Courses

- Certified Incident Handler
- Chief Information Security Officer

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.