Certified Computer Examiner (CCE) (Official)

Duration: 4 Days

Module 1 - Introduction to Computer Forensics

- Recommended Machine Configurations
- What makes a good computer forensic examiner?
- Computer Forensics vs. E Discovery
- Dealing with clients or employers
    - Work Product
    - Client Contracts
    - Legal and privacy issues
- Software Licensing
- Ethical Conduct Issues
- Cases that may include digital evidence
- Forensic Examination Procedures
- Determining Scope of Examinations
- Hardware and Imaging Issues
- USB and Optical Media Examination
- Limited Examinations
- Forensically Sterile Examination Media
- Examination Documentation and Reports
- ASCII Table
- General Overview of Boot Process and Operating Systems
- BIOS History
- Networked Computers
- Media Acquisition
- Acquisition Documentation
- Chain of Custody

Module 2 - Imaging

- Imaging Theory and Process
- Imaging Methods
- Write Blocking
- Imaging Flash Drives
- Wiping, Hashing, Validation, Image Restoration, Cloning, Unallocated Space
- Drive Partitioning

Module 3 - File Signatures, Data Formats & Unallocated Space

- File Identification
- File Headers
- General File Types
- File Viewers
- Examination of Compressed Files
- Data Carving
- One (1) Student Lab Practical Exercise

Module 4 - FAT File System

- Logical structures of DOS and the Windows Operating System
- Master Boot Record
- File Allocation Table
    - 16 Bit FAT
    - 32 Bit FAT
- Directory Entries
- Clusters
- Unallocated Space
- Sub-Directories
- FORMAT
- Six (6) Student Lab Practical Exercises

Module 5 - NTFS

- Introduction and Overview
- Basic Terms
- Basic Boot Record Information
- Time Stamps
- Root Directory
- Recycle Bin
- File Creation
- File Deletion
- Examining NTFS Drives
- Two (2) Student Lab Practical Exercises

Module 6 - Registry & Artifacts

- Creating an Examination Boot Disk
- Data Recovery
- Windows Swap and Page Files
- Forensic Analysis of the Windows Registry
- Internet Cache Files, Cookies and Internet Sites
- Microsoft Outlook
- MSMAIL
- Logical Structures
- Tracking User Specific Computer Use
- Internet Explorer Cache Index
- Basic Mail Issues
- Basic Internet Issues
- Common Situations Encountered during Examinations
- Password Protection and Defeating Passwords
- Compound Documents
- Examining CDR Media
- Three (3) Student Lab Practical Exercises

Module 7 - Forensic Policy, Case Writing, Legal Process & Forensic Tool Kits

- Use of Policy and Checklists in Forensic Practice
- Data Presentation to Client
- Case Report Writing
- Legal Process
- Expert Admission
- Going to Court
- Use of Forensic Tools and Software
- One (1) Student Lab Practical Exercise - Hard drive examination

Module 8 - Introduction to Mobile Data Exploitation

- Mobile Phone Extraction Process
    - Collection
    - Isolation
    - Interrogation
    - Imaging
    - Analysis
- Mobile Networks
- International Mobile Subscriber Identity
- Use of Forensic Tools and Software