



MODULE 1 : INTRODUCTION TO DIGITAL FORENSICS

- 1.1 Introduction
- 1.2 Fundamentals
- 1.3 Digital Evidence
- 1.4 Analysis Steps
- 1.5 Investigation Scope
- 1.6 Reconstructing Of The Crime Scene
- 1.7 Challenges Of Digital Evidence
- 1.8 Major Concept

MODULE 2 : DATA ACQUISITION

- 2.1 Introduction
- 2.2 Storage Formats
- 2.3 Acquisition Method
- 2.4 Write Blocker
- 2.5 Live Data Acquisition
- 2.6 Tools
- 2.7 Validating the Evidence
- 2.8 Exploring the Evidence
- 2.9 Time & Timestamps

MODULE 3 : DEFEATING ANTI-FORENSICS TECHNIQUES

- 3.1 Understanding Anti-Forensics Techniques
- 3.2 Data Deletion
- 3.3 Finding Hidden Data
- 3.4 Understanding Anti-Forensics Countermeasures

MODULE 4 : DATA RECOVERY & FILE CARVING

- 4.1 Understanding How Data Is Stored
- 4.2 Logical Data Recovery
- 4.3 Recovering Data From Recycle Bin
- 4.4 File Carving
- 4.5 Raw Data Recovery

MODULE 5: UNDERSTANDING HARD DISKS

- 5.1 Different Types of Disk Drives & Their Characteristics
- 5.2 Understanding Logical Structure of a Disk
- 5.3 Booting Process of Linux, Windows & macOS
- 5.4 File System Analysis with Autopsy
- 5.5 Understanding Storage Systems (RAID & NAS)





MODULE 6: UNDERSTANDING FILE SYSTEM

- 6.1 New Technology File System (NTFS)
- 6.2 File Allocation Table (FAT)
- 6.3 Extended File System
- 6.4 Extensible File Allocation Table (exFAT)
- 6.5 Hierarchical File System (HFS)
- 6.6 Apple File System (APFS)

MODULE 7 : WINDOWS FORENSICS

- 7.1 Collecting Evidence
- 7.2 Windows Registry Forensics
- 7.3 Examine Cache, Cookies and History Stored in Web Browsers
- 7.4 Examine Windows Files and Metadata Analysis
- 7.5 Investigating Windows Logs
- 7.6 File Signature Analysis

MODULE 8 : LINUX FORENSICS

- 8.1 Understanding Volatile & Non-Volatile Data in Linux
- 8.2 Linux File System & Analysis
- 8.3 Linux Memory Acquisition

MODULE 9 : MEMORY FORENSICS

- 9.1 Memory Acquisition
- 9.2 Volatility: Introduction
- 9.3 MemProcFS: Introduction
- 9.4 Windows Memory Analysis
- 9.5 Linux Memory Analysis
- 9.6 Analysis of Malware-Affected System Memory

MODULE 10 : DARK WEB FORENSICS

- 10.1 Understanding Dark Web
- 10.2 Identifying Traces of Tor Browser During Investigation
- 10.3 Performing Tor Browser Forensics

MODULE 11 : ANDROID FORENSICS

- 11.1 Importance of Android Device Forensics
- 11.2 Steps Involved in Android Device Forensics
- 11.3 Performing Logical Data Acquisition
- 11.4 Rooting
- 11.5 Performing Physical Data Acquisition
- 11.6 Analyzing Android with Autopsy
- 11.7 Challenges Faced During Android Device Forensics





MODULE 12 : IOS FORENSICS

- 12.1 Importance of iOS Device Forensics
- 12.2 Steps Involved in iOS Device Forensics
- 12.3 Performing Logical Data Acquisition
- 12.4 Jailbreaking
- 12.5 Performing Physical Data Acquisition
- 12.6 Analyzing iOS with Autopsy
- 12.7 Challenges Faced During iOS Device Forensics

MODULE 13 : NETWORK FORENSICS

- 13.1 Understanding Network Forensics
- 13.2 Indicators of Compromise (IOCs)
- 13.3 Investigating Network Traffic
- 13.4 Analyzing Network Logs

MODULE 14 : ADVANCED FORENSICS TOOLS

- 14.1 PassMark: OSForensics
- 14.2 Magnet AXIOM
- 14.3 Cellebrite UFED
- 14.4 Internet Evidence Finder
- 14.5 Oxygen Detective
- 14.6 Cellebrite Physical Analyzer
- 14.7 MD-NEXT, MD-RED
- 14.8 Amped FIVE

BONUS MODULES

- MODULE 15: Cloud Forensic
- MODULE 16: Database Forensic
- MODULE 17: Linux-Based Forensic OS
- MODULE 18: Introduction to Professional Data Recovery

MODULE 19 : CCTV & VIDEO EVIDENCE FORENSICS

- 19.1 DVR Extraction
- 19.2 Proprietary Video Format Conversion
- 19.3 Video Evidence Enhancements
- 19.4 Data Carving from DVR Disk

Module 20: Final Exam

PRACTICAL CHALLENGE

