# **Chapter 1 – Introduction**

- ➤ History of Hacking & Hackers
- ➤ What is Information Security?
- Problems faced by the Corporate World
- Why Corporate needs Information Security?
- > The CIA Triad
- ➤ Hacking Legal or Not?
- > Type of Ethical Hackers
- > Hackers vs. Crackers
- Classification of Hackers
- Phases of Hacking
- Basic Terminologies

# **Chapter 2 – Networking**

- ➤ What is a Network?
- ➤ Network Topologies
- ➤ Networking Devices and Cables
- Concept of Ports and Services
- > ISO OSI Model
- ➤ TCP/IP Protocol Suite
- Client Server Relationship
- > IP Address
- Anatomy of IP Addresses
- Networking Protocols
  - ✓ ARP
  - ✓ RARP
  - ✓ ICMP
  - ✓ FTP
  - ✓ Telnet
  - ✓ SMTP
  - ✓ SNMP
  - ✓ HTTP
  - ✓ POP

#### Virtualization

- ✓ Introduction to virtualization
- ✓ Advantages of Virtualization
- ✓ Virtual Box
- ✓ Vmware Worksation

#### > Linux

- ✓ Introduction
- ✓ Installation
- ✓ Basic Linux Commands
- ✓ Installing Linux application

# Chapter 3 – Footprinting/Reconnaissance

- Footprinting/Information Gathering
- > Types of Footprinting
  - ✓ Active
  - ✓ Passive
- ➤ Informaion Gathering Principle
- Steps to Information Gathering
- Who.is and Domain Registry
- ➤ Gathering Target Information
  - ✓ Search for People and their Information
  - ✓ Search for Company's Information
  - ✓ Footprinting Through Search Engines
  - ✓ Tracking Target Location
  - ✓ Information gathering using social media
- Parallel Domain
- ➤ MX Entry
- > Trace Route
- Archive Pages
- Crawling and Mirroring of Websites
- Banner Grabbing
- Prevention Techniques

# **Module 4: Google Hacking**

- ➤ Introduction to Google
- ➤ Working of Google Outline
- Working of Google Crawling, Indexing & Searching
- Using Cache and Google as Proxy
- Directory Listing and Locating Directory Listings along with specific folders

- Google Hacking and what it is about
- The basics of Google Hacking: Advanced Search in Google
- Advance Search Operators: site:, filetype:, inurl:, intitle:, cache:, info:
- Wildcard and Quotes
- Understanding and Viewing Robots.txt for important Files
- Prevention Techniques
  - ✓ Robot.txt
  - ✓ Metatag and Google Official Remove
  - ✓ Hiding Detailed Error Messages
  - ✓ Disabling Directory Browsing
- > Tools
  - ✓ Wikto
  - √ GoogleHacks

## **Module 5: Scanning**

- Definition of Scanning
- > Types of Scanning
- Difference between Port and Network Scanning
- Objectives and Benefits of Scanning
- > TCP three way hands shake
- Classification of Scanning
- Fragments, UDP, ICMP, Reverse Ident, List & Idle, RPC, Window Scan, Ping Sweep
- Concept of War Dialer (History)
- OS Finger Printing and Types Active & Passive
- Concealing file extensions
- Annonomizers
- Scanning Tools
  - ✓ T1Shopper.com
  - √ Yougetsignal
  - ✓ Advanced Port Scanner v1.3 (Radmin Advanced Port Scanner)
  - ✓ Watsup Port Scanner
  - ✓ NetScanner
  - ✓ Mi-Tec Network Scanner

# Module 6: System Hacking: Win7 and Linux

### > System Hacking

- ✓ Introduction to System Hacking
- ✓ System Hacking Techniques

- ✓ Steps to Crack Passwords
- ✓ Password Attack Classification Dictionary, Brute Force and Hybrid
- ✓ LM Hash and Sam File
- ✓ Password Recovery through Elcomsoft
- ✓ SysKey
- ✓ Hiding Files
- ✓ Ophcrack
- ✓ Hiren Boot
- ✓ NTFS Stream Countermeasures
- ✓ Password Cracking Countermeasures
- ✓ Concept of Auditing, Logs, Covering Tracks
- ✓ Concept of Application Isolation

### Linux Hacking

- ✓ Why Linux is hacked?
- ✓ Recent Linux Vulnerabilities
- ✓ Password cracking in Linux
- ✓ Introduction and explanation of IP Tables & IP Chains
- ✓ TCP wrappers
- ✓ Remote connection using SSH
- ✓ Log and Traffic Monitors in Linux
- ✓ Understanding Post Install Linux Security Auditing
- ✓ Understanding and using Backtrack

### Keylogger

- ✓ Categorization of Keystroke Loggers
- ✓ Acoustic/CAM Keyloggers
- ✓ Advanced Keylogger
- ✓ Keylogger: Spytech SpyAgent
- ✓ Keylogger: Perfect Keylogger
- √ Keylogger: Powered Keylogger
- ✓ Hardware Keylogger: KeyGhost

#### Rootkits

- ✓ Types of Rootkits
- ✓ Rootkit Working Mechanism
- ✓ Rootkit: Fu
- ✓ Steps to detect Rootkits
- ✓ Shielding from Rootkit Attacks
- ✓ Anti Rootkit Tools: Rootkit Revealer and McAfee Rootkit Revealer

#### Cover Tracks

- ✓ What are Covering Tracks?
- ✓ Techniques to clear Tracks
- ✓ Covering Track Tools

# Module 7: Android & iPhone Hacking

### > Android Security

- ✓ Introduction to Android Security
- ✓ Android Malwares
- ✓ Securing Your Android Techniques
- ✓ APK file package
- ✓ Investigating layout, manifest, permissions and binaries
- ✓ Analyzing file system access
- ✓ Investigating database & storage usage
- ✓ Memory analysis
- ✓ Memory dumps
- ✓ Patching & Binary modifications
- ✓ Traffic Manipulation
- ✓ Traffic interception
- ✓ Using proxies
- ✓ Exposing insecure traffic

### > iPhone Security

- ✓ iOS Security Basics
- ✓ iOS Hardware/Dev ice Types
- ✓ Understanding the iOS Security Architecture
  - The Reduced Attack Surface
  - The Stripped-Down iOS
  - Privilege Separation
  - Code Signing
  - Data Execution Prevention
  - AddressSpace Layout Randomization
  - Sandboxing
- ✓ History of iOS Attack
  - o Libtiff
  - o Fun with SMS
  - o Ilkee Worm
  - o Jailbreakme
- √ 5 iOS Configuration Management

#### **Module 8: Malwares**

### 1. Trojans

## > Introduction to Trojans

- ✓ What is Trojan?
- ✓ Identifying Overt & Covert Channels
- ✓ Types of Trojans
- ✓ Working of Trojans
- ✓ Purpose of Trojan inventor
- ✓ Detecting Trojan Attacks
- ✓ Ports used by Trojans

### > Types of Trojans

- ✓ Trojan Types
- ✓ Remote Access Trojans
- ✓ Beast Demo
- ✓ Remote Access Trojan: RAT DarkComet

## > Trojan Detection

- ✓ Trojan Detection
- ✓ Suspicious Port Detection
- ✓ Suspicious Process Scanning
- ✓ Process Monitoring Tools
- ✓ Examining the Registry Entries
- ✓ Windows Startup Registry Entries
- ✓ Startup Programs Monitoring Tools
- ✓ Suspicious Files and Folders Detection
- ✓ Reliability Check of Files & Folder
- ✓ Network Activity Detection

#### Backdoors

- ✓ What is Backdoor?
- ✓ Backdoor Installation Process
- ✓ System Control through backdoor

### Prevention Techniques

- ✓ Protection from Trojan Attacks
- ✓ Protection from Backdoor Attacks

### 2. Virus

#### > Introduction to Virus

- ✓ Working of Viruses: Infection Phase
- ✓ Working of Viruses: Attack Phase
- ✓ Purpose of Computer Viruses
- ✓ Computer infection by Viruses
- ✓ Signs of Virus Attack
- ✓ Virus Hoaxes
- ✓ Virus Analysis

## > Types of Virus

- ✓ Characteristics, Symptoms of Viruses
- ✓ System or Boot Sector Viruses
- ✓ Life Cycle of Viruses
- ✓ Famous Virus Program
- ✓ Virus Detection Method
- ✓ Countermeasures

### 3. Worms

- Computer Worms
- > Difference between Worm & Virus
- Worm Analysis

### 4. Spyware

- Spyware: Introduction
- What does a Spyware do?
- > Types of Spywares
- Routes of Infection
- ➤ Internet and E-mail Spyware
- Effects & Behaviors
- Difference between Spyware and Adware

#### 5. Prevention Methods

- ➤ Anti-Spyware Program
- > Anti-Virus Program
- > Defense against Worms

## **Module 9: SQL Injection**

## > SQL Injection Concepts

- ✓ Basics of SQL
- ✓ Web Application Working
- ✓ Introduction to Server Side Technologies
- ✓ HTTP Methods
- ✓ HTTP POST method basics

### > Testing for SQL Injection

- ✓ Identifying SQL injection via
  - Error Messages
  - Attack Characters
- ✓ Techniques to identify SQL Injection
- ✓ Pentesting methodologies for SQL Injection

## > Types of SQL Injection

- ✓ Types of SQL Injection
- ✓ Simple SQL Injection Attack
- ✓ Union SQL Injection Example
- ✓ SQL Injection Error based

### Blind SQL Injection

- ✓ What is Blind SQL Injection?
- ✓ Symptoms of Blind SQL Injection
- ✓ Information extraction via Blind SQL injection
- ✓ Exploitation techniques (MySQL)

## > Advanced SQL Injection

- ✓ Information Gathering
- ✓ Features of different DBMSs
- ✓ Extracting Information through error messages
- ✓ Understanding parameters of an SQL Query
- ✓ Evading website login pages
- ✓ Master Data and Enumeration Tables
- ✓ Creating Database Accounts for alternate access
- ✓ Password Grabbing via Hash Extraction
- ✓ Database Transfer
- ✓ Interacting with the Victim System

### > SQL Injection Tools

- ✓ BSQL Hacker
- ✓ Marathon Tool
- ✓ SQL Power Injector
- ✓ Havij
- ✓ SQLPoizon
- Preventive measures for SQL Injection
  - ✓ Defensive measures for Web Applications
  - ✓ Tools for detection of SQL Injection

## **Module 10: Cross Site Scripting**

- Introduction Cross Site Scripting
- Cross-Site Scripting
- Ways of Launching Cross-Site Scripting Attacks
- Working Process of Cross-Site Scripting Attacks
- ➤ When will be an attack successful?
- Programming Languages Utilized in XSS Attacks
- > Types of XSS Attacks
- Steps of XSS Attack
- ➤ Not Fixing CSS/XSS Holes Compromises
- Methodology of XSS
- How to protect Against XSS

# **Module 11: Sniffing**

- Sniffing Concepts
- Sniffing Threats in Network
- Working of Sniffers
- > Types of Sniffing
  - ✓ Active Sniffing
  - ✓ Passive Sniffing
- Protocols vulnerable for Sniffing
- Sniffing Tools
  - ✓ Wireshark
  - ✓ Tcpdump
  - ✓ Cain & able

- √ NwInvestigator
- Sniffing Prevention Techniques
  - ✓ Wiretapping
  - ✓ Hardware Protocol Analyzers
  - ✓ Port mirroring
  - ✓ MAC Flooding
  - ✓ Mac Flooding through Yersinia
- Spoofing Attack
- > IP Spoofing
- MAC Spoofing
- ➤ MAC Spoofing Impact
- ➤ MAC Spoofing Tool
- Prevention measures form MAC Spoofing
- > DNS Poisoning
  - ✓ DNS Poisoning Methodologies
  - ✓ Intranet DNS Spoofing
  - ✓ DNS Cache Poisoning
  - ✓ Prevention measures from DNS Spoofing

## **Module 12: Social Engineering**

### Introduction to Social Engineering

- ✓ What is Social Engineering?
- ✓ Techniques of Social Engineering
- ✓ Attempt Using Phone, E-mail, Traditional mail, In person, Dumpster Diving, Insider Accomplice, Extortion and Blackmail, Websites, Shoulder surfing, Third Person Approach, Technical Support
- ✓ Computer based Social Engineering
- ✓ Social Networking Sites –Impersonation platform/medium

## > Social Engineering Prevention Methods

- ✓ Policies
- ✓ Techniques to prevent social engineering methods
- ✓ Identifying Phishing Emails
- ✓ Anti-Phishing Toolbar

# **Module 13: Identity Theft Fraud**

- > Introduction to Identity Theft
- Identity Theft occurrence
- > Impact of Identity Theft fraud
- > Types of Identity Theft
- Dumpster Diving
- Change of ID
- ➤ E-Mail Theft
- Smishing
- Vishing
- Data Breach
- Overlays
- > ATM Schemers / Hand-held Skimmers
- Shoulder Surfing
- Prevention Techniques

### **Module 14: Denial of Service**

#### > DDOS Concepts

- ✓ Concept: Denial of Service
- ✓ Introduction to Distributed Denial of Service Attacks?
- ✓ Working of Distributed Denial of Service Attacks?
- ✓ Symptoms of a DOS Attack
- ✓ Impact DDOS/DOS Attack
- ✓ Difference of DDOS & DOS

### DoS/DDoS Attack Techniques

- ✓ Types of DOS Attack
- ✓ Smurf Attack
- ✓ Buffer Overflow Attack
- ✓ Ping of Death Attack
- ✓ Tear Drop Attack
- ✓ SYN Attack
- ✓ Concept of Reflected DOS
- ✓ Permanent Denial of Service Attack
- ✓ Mitigate the DDOS/DOS Attack

#### Botnets

- ✓ Intoduction to Botnet
- ✓ Botnet Propagation Technique
- ✓ Detection Techniques
- ✓ How to defend against Botnets

# **Module 15: Session Hijacking**

- Session Hijacking Concepts
- What is Session Hijacking?
- > Types of Session Hijacking
  - ✓ Active
  - ✓ Passive
- Success rate of Session Hijacking
- Techniques for Session Hijacking
- Phases of Session Hijacking
  - ✓ Tracking the session
  - ✓ Desynchronizing the connection
  - ✓ Session Sniffing
  - ✓ Predictable Session Token
  - Difference between Spoofing and Session Hijacking
    - ✓ Man-in-the-Middle Attack
    - ✓ Man-in-the-Browser Attack
    - ✓ Steps to perform Man-in-the-Browser Attack
  - Session Hijacking Tools
  - ✓ Greasemonkey with cookie injector
  - ✓ Paros
  - ✓ Burp Suite
  - ✓ Firesheep
  - Prevention Methods
  - ✓ Browser protection
  - ✓ Methodologies to prevent Session Hijacking
  - ✓ IPSec
  - ✓ Modes of IPSec
  - ✓ Architecture of IPSec
  - ✓ IPSec Authentication and Confidentiality
  - ✓ IPSec Components and Implementation

## **Module 16: Penetration Testing**

## > Pen Testing Concepts

- ✓ Security and Vulnerability Assessments
- ✓ Limitations of Vulnerability Assessments
- ✓ What is Penetration Testing?
- ✓ Why Penetration Testing is Necessary?

### > Types of Pen Testing

- ✓ Penetration Testing Types
- ✓ External Penetration Testing
- ✓ Internal Security Assessment
- ✓ Black Box Penetration Testing
- ✓ Grey Box Penetration Testing
- ✓ White Box Penetration Testing

## Pen Testing Phases

- ✓ Phases of Penetration Testing
- ✓ Pre-Attack Phase
- ✓ Attack Phase
- ✓ Enumerating Devices
- ✓ Post Attack Phase
- ✓ Penetration Testing Deliverable Templates

### Pen Testing Methodology

- ✓ Terms Of Agreement
- ✓ Project Scope
- ✓ Application Security Assessment
- ✓ Web Application Testing
- ✓ Network Security Assessment
- ✓ Wireless/Remote Access Assessment
- ✓ Wireless Testing
- ✓ TelepSocial Engineering
- ✓ Denial of Service Assessment

### Pen Testing Tools

- ✓ Different types of Pentest Tools
- ✓ Application Security Assessment Tool: Webscarab
- ✓ Application Security Assessment Tool: Angry IP Scanner
- ✓ Application Security Assessment Tool: GFI LANguard
- ✓ Wireless/ Remote Access Assessment Tool: Kismet
- ✓ Telephony Security Assessment Tool: Omnipeek
- ✓ Testing Network- Filtering Device Tool: Traffic IQ Professional
- ✓ Metasploit Framework

### Vulnerability Assessment

- ✓ Concept of Vulnerability Assessment
- ✓ Purpose Types of Assessment
- ✓ Vulnerability Classification
- ✓ How to Conduct Vulnerability Assessment
- ✓ Vulnerability Analysis Stages
- ✓ Vulnerability Assessment Considerations
- ✓ Vulnerability Assessment Reports
- ✓ TimeLine and Penetration Attempts
- ✓ Vulnerability Assessment Tools

## **Module 17: Exploit Writing & Buffer Overflow**

#### 1. Exploit Writing

- Concept of Exploit Writing
- Purpose of Exploit Writing
- Requirements of Exploits Writing & Shell codes
- > Types of Exploits:-
  - ✓ Stack Overflow Exploits
  - ✓ Heap Corruption Exploit
  - ✓ Format String Attack
  - ✓ Integer Bug Exploits
  - ✓ Race Condition
  - ✓ TCP/IP Attack
- > The Proof-of-Concept and Commercial Grade Exploit
- Converting a Proof of Concept Exploit to Commercial Grade Exploit
- Attack Methodologies
- Socket Binding Exploits

- Steps for Writing an Exploit
- > Shellcodes
- ➤ Null Byte
- > Types of Shellcode
- Steps for Writing a ShellCode
- Issues Involved With Shellcode Writing
- Buffer
- Static Vs Dynamic Variables
- Stack Buffers, Data Region and Memory Process Regions
- About the Stack
- Need of Stack, Stack Region, Stack frame, Stack pointer, Procedure Call (Procedure
- Prolog), Return Address (RET), Word Size and Buffer Overflows,
- Why do we get a segmentation violation and Segmentation Error
- Writing Windows Based Exploits
- EIP Register and ESP
- Metasploit Framework, msfconsole
- Development with Metasploit
- ➤ Need for Creating of Exploit
- Determining the Attack Vector
- Debugger
- > Determine the offset & pattern create
- Where to place the payload?

#### 2. Buffer Overflow

- Why Applications are vulnerable
- Buffer Overflow Attack
- Reasons of Buffer Overflow
- Knowledge for Buffer Overflow
- Understanding Stacks
- Understanding Heaps
- > Types of Buffer Overflow Attack
  - ✓ Stack Based
  - √ Heap Based
- Heap Memory Buffer overflow Bug
- Understanding Assembly Language
- ➤ Intro of Shell Code
- Detection of Buffer Overflows in a program
- Attacking a Real Program
- Once the Stack is smashed
- ➤ NOPS
- Mutate a Buffer Overflow Exploit
- Comparing Functions of libc and libsafe

## Module 18: Cryptography & Steganography

## 1. Cryptography

- Concept of Cryptography
- Advantages and uses of Cryptography
- > PKI (Public Key Infrastructure)
- Algorithm's of encryption RSA, MD5, SHA, SSL, PGP, SSH, GAK
- Concept of Digital Signature
- ➤ Encryption Cracking Techniques
- Disk Encryption
- Cracking S/MIME encryption using idle CPU time
- Concept of Command Line Scriptor and Crypto Heaven, Cyphercalc
- CA (Certificate Authority)

### 2. Steganography

- What is Steganography?
- History
- Steganography today
- Steganography tools
- Steganalysis
  - ✓ What is Steganalysis?
  - ✓ Types of analysis
  - √ Identification of Steganographic files
- > Steganalysis meets Cryptanalysis
  - ✓ Password Guessing
  - ✓ Cracking Steganography programs
- Conclusions
  - ✓ What's in the Future?
  - ✓ Other tools in the wild

# Module 19: Firewalls & Honeypots

### 1. Firewall

- ➤ What Does a Firewall Do?
- What a firewall cannot do
- ➤ How does a firewall work?
- > Types of Firewall
- Working of Firewall
- Advantages and Disadvantages of Firewall
- > Firewalls Implementing for Authentication Process

- > Types of Authentication Process
- Steps for Conducting Firewall Penetration Testing
  - ✓ Locate the Firewall
  - ✓ Traceroute to identify the network range
  - ✓ Port scan the router
  - ✓ Grab the banner
  - ✓ Create custom packet and look for firewall responses
  - ✓ Test access control Enumeration
  - ✓ Test to indentify firewall architecture
  - ✓ Test firewall using firewalking tool
  - ✓ Test for port redirection
  - ✓ Test Convert channels
  - ✓ Test HTTP Tunneling
  - ✓ Test firewall specific vulnerabilities
- How to Bypassing the Firewall

### 2. Honeypots

- Concept of Honeypots
- Purpose and working of Honeypots
- Advantages and Disadvantages of Honeypots
- > Types of Honeypots
- Uses of Honeypots
- Detecting Honeypot
- Honeynets
- > Architecture of Honeynet
- Working process of Honeynet
- > Types of Honeynet
- > Honeywall CDROM

#### Module 20: IDS & IPS

- Concept of IDS (Intrusion Detection System)
- History and Characteristics of IDS
- Importance of IDS
- Deployment of IDS
- Intro, Advantages and Components of Distributed IDS
- Aggregate Analysis with IDS
- > Types and Architecture of IDS:-
  - ✓ Network Based IDS
  - ✓ Host Based IDS

- Diff. Between Network Base IDS and Host Base IDS
- Methods to Detect IDS
- Signatures
- > Types of Signature:-
  - ✓ Network Signatures
  - ✓ Host-based Signatures
  - ✓ Compound Signatures
- ➤ Methods to Detect Signature
- Prelude of IDS
- Concept of IPS (Intrusion Prevention System)
- ➤ Diff. Between IDS and IPS
- Network Antivirus Software's

## **Module 21: Hacking Web Server**

#### 1. Web Servers

- Working process of Web Server
- ➤ Loopholes of Web Server
- ➤ Introduction of Popular Web Server and Common Security Threats
- Apache Vulnerability
- > Attacks against IIS
- Components of IIS
- > IIS Directory Traversal
- Unicode and Unicode Directory Traversal Vulnerability
- Unspecified Executable Path Vulnerability
- > File System Traversal Counter measures
- WebDAV / ntdlldll Vulnerability
- > RPC DCOM Vulnerability
- ➤ ASN Exploits
- ➢ IIS Logs
- Escalating Privileges on IIS
- ➤ Hot Fixes and Patches
- Countermeasures of Web Server

- Wireless Technology
- Introduction to wireless networking
- ➢ Basics & Terminologies
- Advantages of Wireless Technology
- Components of Wireless Network
- Types of Wireless Network
- > Setting and detecting a wireless network
- Advantages and Disadvantages of wireless network
- Antennas, SSID, Access Point Positioning and Rogue Access Point
- Concept of Wired Equivalent Privacy (WEP)
- MAC Sniffing & AP Spoofing
- ➤ Terminology of Wi-Fi Access
- Denial-of-Service and MITM Attack in Wi-Fi
- Wireless Intrusion Detection System
- ➤ Tips to Secure Wireless Network

## **Module 23: Physical Security**

- Physical Security
- Current Statistics
- Accountability and Need of Physical security
- Factors Affecting Physical Security
- Physical Security Checklist
  - ✓ Company Surroundings
  - ✓ Premises
  - ✓ Reception
  - ✓ Server
  - ✓ Workstation Area
  - ✓ Wireless Access Points
  - ✓ Other Equipments such as fax, removable media etc
  - ✓ Access Control
  - ✓ Computer Equipment Maintenance
  - ✓ Wiretapping
  - ✓ Remote Access
  - ✓ Locks
  - ✓ Spyware

## **Module 24: Reverse Engineering**

- Concept of Reverse Engineering
- Positive Application of Reverse Engineering
- > Ethical Reverse Engineering
- DMCA ACT
- Disassembler
- Decompilers
- Program Obfuscation
- Why do you need to decompile?
- NET Obfuscator and NET Obfuscation
- Java Byte code Decompilers
- ➤ How does OllyDbg Work?

# **Module 25: Email Hacking**

- Concept of Email
- Spam and Spam Laws
- > E-Mail Tracking By Header
- Concept of Fake E-mails
- Various steps to send Fake mails
- > Trace ip by PHP Script

# **Module 26: Security Compliance and Auditing**

- Security Compliance and Auditing
- ➤ What is compliance?
- ➤ Need for Security Compliance
- > Standards for Security Compliance
  - ✓ ISO 27001
  - ✓ PCI DSS
- > Introduction to IT Auditing
- ➤ What is Security auditing?
- ➤ What is the need for Security auditing?
- > Relevance of compliance standards in Auditing
- > Importance of Risk Management

# **Module 27:Incident Handling & Computer forensics**

- Understanding Incidents
- o Exploring the incident paradigm: classifications and meaning
- o Incidents: Types and functionality
- Controlling Incidents
- o Incident Response: A Brief Overview
- o Incident Response: structural design
- Incident Handling
- o Computer Security Incident Response Team (CSIRT)?
- Define Computer forensics
- o key rules for computer forensics
- o computer forensic procedure
- Identification of evidence
- Acquisition
- o Preservation of evidence
- o Analysis of evidence
- Documentation
- o file recovery, Data analysis, screen capture
- o mail password viewer, network password viewer
- IE history viewer
- o mozzila cookie viewer
- o chain of custody
- o Introduction of Memory Forensics.