

Cyber Security

COURSE CONTENT

Summer Training Program



Cyber Security (40-45 Hours)

Course Contents

Introduction

- Need of Cyber Security
- Career opportunities in industry
- Virtualization
- Basic commands of Kali Linux

Networking

- IPv4
- IPv6
- OSI Model
- Networking Devices
- Network Address Translation

Enumeration & Information Gathering

- Information gathering
- WHOIS
- Traceroute
- Name server lookup

Google Hacking Database

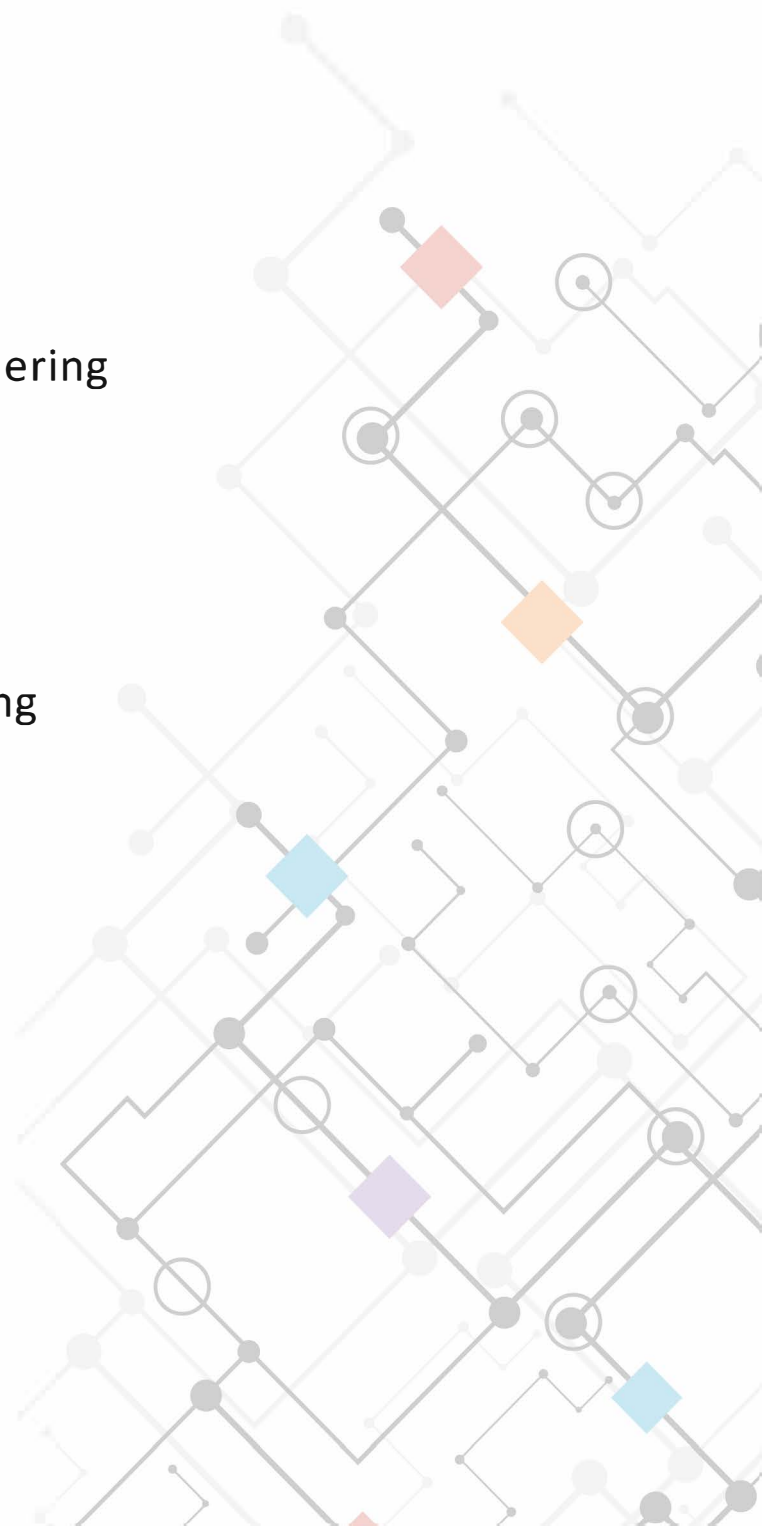
- Advanced information gathering
- Google dorks/Operators
- Spider/Crawler

Scanning

- Ping & ping sweep
- Port scanning
- Vulnerability scanning

System Hacking

- Active attack
- Passive attack
- Default passwords



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Malwares

- Viruses
- Worms
- Trojans
- Rootkits
- Adwares
- Spywares

Wi-Fi Hacking

- Bypassing WEP
- Bypassing WPA/WPA2

Website Security

- HTTP vs HTTPS
- Automated SQL Injection
- XSS (Cross Site Scripting)

Denial of Service

- DoS vs DDoS
- Countermeasures

Cryptography

- Introduction
- Types of encryption
- Hashing
- Steganography

Firewall

- IPS
- IDS
- Firewalls

