

# **CERTIFICATE COURSE IN CYBER SECURITY**

**Total Duration: 100 Hrs**

## **1. Introduction of Internet**

-Internet Addresses, DNS, Internet Infrastructure, World Wide Web.

## **2. Introduction to Cyber Crime**

-Classification of cyber-crimes, reasons for commission of cyber-crimes.

## **3. Cyber Security Fundamentals**

-Introduction to Cybersecurity Science, The Importance of Cybersecurity science, Network security concepts, Microsoft windows security principles.

## **4. Malware and its types**

-Adware, spyware, browser hacking software, virus, worms, Trojan horse, scareware.

## **5. Kinds of Cyber crime**

-Cyber stalking, child pornography, forgery and counterfeiting, software piracy and crime related to IPRS, phishing, vishing, computer hacking and vandalism, spamming etc

## **6. Authentication, Encryption, Digital signatures**

## **7. Attackers Techniques and Motivation**

-How and why attackers use proxies, Detecting the use of proxies, tunnelling techniques fraud techniques, threat infrastructures.

## **8. Setting up your virtual lab**

-VMware, Introduction to Kali Linux/ParrotOS, programming, Exploitation using Metasploit Framework.

## **9. Malicious Code**

-Self-replicating Malicious code, evading detection and elevating privileges, Stealing information and Exploitation.

## **10. Practical's**

## **11. Soft Skills**

Verbal/ Non-verbal communication, Interview skills, Professional/social etiquettes, Professional correspondence/ English