

# Certificate Course in Cyber Security and Forensic

## Objective of the Course:

To enrich the participants in the area of IT and Cyber Security to enhance the security measures of the organization.

## Learning Outcomes:

The course focuses at helping the participants gain expertise and knowledge in the field of cyber security. The faculty will help the participants to cover all the cyber security skills such as cryptography, network security, ethical hacking, web penetration testing, application security, etc. Also, the participants will get to learn several open source tools.

## Course Syllabus:

### DAY WISE TRAINING PROGRAM

Day	Topics Name	Theory (Hrs)	Practical (Hrs)
1	Introduction to Cyber Security & Information Security (overview, importance, etc.)	4	-
2	Network Penetration Testing – Part1 (Scanning, Security control, Vulnerability Assessment, traffic analysis, packet analysis)	1	3
3	Network Penetration Testing – Part2 (Sniffing & Spoofing, Mac binding, Port Forwarding, Bypassing Firewalls, Anti-Virus Bypass)	1	3
4	Network Penetration Testing – Part3/ Application security (Router Pen testing, Privilege Escalation, Advance Exploitation, Metasploit, Buffer Overflow, etc.)	1	3
5	Sys Internals, Security Information and Event Management (SIEM) - concepts, solutions, deployment	1	3
6	Security Operations and Management - concept and implementation	2	2
7	Identity and Access Management - Access control, Authentication and authorization	1	3
8	Web Application Penetration Testing – Part1 (SQL Injection, Cross-Site Scripting, Authentication and Authorization, Bypassing Authorization)	1	3
9	Web Application Penetration Testing – Part2 (, Session Security, Flash Security and Attacks, File and Resource Attacks, etc.)	1	3
10	Cryptography, Symmetric, Asymmetric, PKI, Hashing, Proxy Configuration	1	3
11	Software Development Security (Security Controls, Life Cycle Security, etc.)	2	2
12	Ethical Hacking –Part1 (Introduction, Foot Printing and Reconnaissance)	1	3
13	Ethical Hacking –Part2 (Password related scenarios, Vulnerability Analysis, Denial-of-Service)	1	3
14	Ethical Hacking –Part3 (Log related attacks, Social Engineering, Malware Detection)	1	3
15	Ethical Hacking –Part4 (IDS and Honeypots)	1	3
16	Ethical Hacking –Part5 (Hacking Wireless Networks, Mobile Platforms, IoT)	1	3
17	Firewall in depth, SQL, DB Server, OS hardening, Web Server & Web Services and DNS Server Configuration – overview	1	3
18	Cyber Forensic – Part1 (Technique and Tools demonstration)	1	3
19	Cyber Forensic – Part1 (Technique and Tools demonstration)	1	3
20	IT Act and Cyber Laws around the world, Cyber Security Standards	4	

**APPLY NOW**

**Duration (in hours):**  
80Hrs (10 am – 2 pm,  
Tuesday and Friday)

**HURRY UP!!**  
**Limited**  
**Seats**

**Eligibility: 10+2**

**Next Batch Starting on: 30th August, 2024 ; Last Date for Admission: 29th August, 2024**

**Contact us:**

**Course Fee:**  
**INR 25000/-**  
**+ GST**

Course Coordinator: Dr. Kalyan Baital, Scientist-D

Phone No. : 033-2414-6054/6081

Address: Unit-I :

NIELIT - Jadavpur University Campus, Kolkata - 700032  
यादवपुर विश्वविद्यालय परिसर, कोलकाता 700032

Unit-II :

Block - BF267, Sector - I, Salt Lake, Kolkata - 700064  
साल्ट लेक कैम्पस, बीएफ-267, सेक्टर-1, साल्ट लेक, कोलकाता - 700064