National Institute of Electronics and Information Technology राष्ट्रीय इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी संस्थान



uration (in hours): BOHIS (10 am

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:

V	Day	Topics Name	Theory (Hrs)	Practica (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, Asymetric, 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
HURRY UP!	18	Cyber Forensic – Part1(Technique and Tools demonstration)	1	3
Solled	19	Cyber Forensic – Part1(Technique and Tools demonstration)	1	3
ots	20	IT Act and Cyber Laws around the world , Cyber Security Standards	4	

Eligibility: 10+2

Course Start Date: 26th April 2024, Last Date for Admission: 23rd April 2024

Contact us:

Course Coordinator: Dr. Kalyan Baital, Scientist-D Asst. Course Coordinator: Mr. Ambuz Ankesh, Scientist-C

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 कैंपस, बीएफ-267, सेक्टर-1, साल्ट लेक, कोलकाता - 700064