Course: Ethical Hacking - Online

Course Code: noc19-cs68

Session: 2019-20

Duration: 12 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

Week 1: Introduction to ethical hacking.

- Fundamentals of computer networking.
- TCP/IP protocol stack.

Week 2: IP addressing and routing.

- TCP and UDP.
- IP subnets.

Week 3: Routing protocols.

- IP version 6.

Week 4: Demonstration Session::

- Vulnerability assessment: OpenVAS, Nessus, etc.
- System hacking: password cracking, penetration testing, etc.

Week 5: Demonstration Session:

- Social engineering attacks.
- Malware threats,
- Penetration testing by creating backdoors.

Week 6: Introduction to cryptography

- Private-key encryption,
- Public-key encryption.

Week 7: Cryptographic hash functions,

- Digital signature and certificate, applications.

Week 8: Steganography,

- Biometric authentication,
- Network-based attacks,
- DNS and Email security.

Week 9: Demonstration Session::

- Sniffing: Wireshark, ARP poisoning, DNS poisoning.
- Hacking wireless networks, Denial of service attacks.

Week 10: Elements of hardware security: side-channel attacks,

- Physical inclinable functions,
- Hardware Trojans.

Week 11: Demonstration Session::

- Hacking web applications: vulnerability assessment,
- SQL injection, cross-site scripting.

Week 12: Case studies: various attacks scenarios and their remedies.

List of students enrolled

S.No	Student Name
1	RITIKA AGARWAL
2	Girish karwasara
3	Shresth Gupta
4	AASHNA PURI
5	Adarsh Pansari
6	aditya bhargava
7	aditya manu sharma
8	Surbhi Agarwal
9	Akshat Jain
10	Akshay Jain
11	Akshat Jain
12	Aman Sharma
13	Anagh Kumar
14	anjali jain
15	Anshul Maurya
16	Anshul Simlote
17	Anshu Verma
18	Anuj Sharma
19	aparna maleti
20	archit
21	Arnav Rajoria
22	srishty
23	Arpit Somani
24	aryan
25	Ayush garg
26	Ayush jangir
27	Parakh
28	VIKAS BISHNOI

29	Chirag Jain
30	devang agrawal
31	Dhruv upadhyay
32	Dipesh singh
33	gautam khatri
34	Harsh Modi
35	hardik somani
36	hardik somani
37	Harsh Khandelwal
38	Hritik Gaur
39	HRITIK KHATRI
40	ANKIT AGRAWAL
41	Jitendra Agrawal
42	Kalpana Modi
43	Harsh kanojia
44	Kaustubh Sharma
45	Yash Khandelwal
46	Swaroop Kumar
47	lakshya dewani
48	Mahima sharma
49	MANINDER SINGH
50	mayank agrawal
51	Mohit Gupta
52	Mohit Sharma
53	PARTH SHARMA
54	Nitin Chittoria
55	Ansh Pancholi
56	Saumya Pancholi
57	vikas kumar prajapat
58	Pranav Parashar
59	Priyanshu Tali
60	Puru Paneri
61	rachit jha
62	Rahul Sharma
63	Rahul Chandnani
64	Rishabh Garg
65	Rishabh mandawariya
66	Rohit Kucheria
67	Roshan Suthar
68	Acchint kaur
69	safdar farooque azam
70	Sagar Alwani
71	Ashik Saini
72	Samarth Saxena
73	Sarthak Arora

74		Akshat sharma
75		Sangeeta Sharma
76		shiv kumar modi
77		shubham agarwal jain
78		Shubham jaiman
79		Sabhyata Agarwal
80		Dinesh Soni
81		saurabh gupta
82		Shubham Udsaria
83		Sunidhi Sharma
84		Swapnil Agrawal
85		Swapnil Saini
86		Rahul Chandnani
87		Tushar Saxena
88		ujjwal bansal
89		Gaurav kumar upadhyay
90		Vibhu Mathur
91		Vibhuti sharma
92		Vidushi Pareek
93		Vinay vyas
94		Vinod Kalwani
95		vishal sen
96		Ansh Shahara
97		Yatharth Varshney