

Department of Computer Engineering



One week Student development
program on **Network Security &
Ethical Hacking**

From Dec 16-21 ,2019

Report :

The department of Computer Engineering of SIES Graduate School of Technology, Nerul, Navi Mumbai has successfully organized and conducted one week student development program on Network Security & Ethical Hacking for Second year students of CE branch from Dec 16-21, 2019 with 15 days of internship.

OBJECTIVES AND GOALS: The main objective of this SDP was to give insight to the participants of ever expanding field of Internet/cyber security world. It is aimed to provide knowledge to the students on how to identify the security parameters and penetration level in any organization in ethical manner and mitigating threats.

The goal is to identify general methodology of performing penetration in the internet world, tools available in performing actions and mitigating the risk .

Outcomes:

As a result of successful completion of this workshop, participants will be able to

- Understand current cyber security threats
- Analyze traffic patterns associated with suspicious network behavior
- Select and configure various Open-Source tools for network security in Kali Linux.

Attendees:

First year engineering students from EXTC/CE/IT/MECH branch. Total 17 participants have attended the program.

Session: Major topics covered during the workshop are

- 1) Basics of Networking Hackby.Prof.Kalyani P
- 2) Scanning and sniffing using open source tools by Prof.SuvarnaChoure
- 3) Password cracking by Prof.SuvarnaChoure
- 4) Metasploit FrameworkProf.Aparna Bannore
- 5) Introduction to Blockchain : Dr. Rizwana Shaikh
- 6)SQLInjection,CSS and Malware detection by Prof.UjwalaRavale
- 7) Browser Exploitation by Dr. Vijay katkar

Mini projects: The students demonstrated the skills developed through various mini projects developed during the workshop.

The topics were Project 1) Metasploit: for hacking windows XP system using Kali linux

Project 2: Keyloggerkeylogger(windows OS)

Project3: Steganography using windows Os using Openstego

Project4: Angry Ip scanner(Windows OS)

Project5: Web vulnerability scanner :netSparkar

Project6: SQLmap using Kali Linux

Feedback:

The training program received good response from resource persons and attendees. All participants received the program very well and implement in their professional career.

Photos of the Event:





Impact Analysis

- The student development program gave insight about various security peripheries in the organization and mechanism to protect the network security.
- The students were demonstrated with ethical manners to inspect the security measures established in organization.
- Students gained from this exposure to various tools used in the industry for penetration testing.

SIES Graduate School of Technology

Organizing

Student Development Program and Internship

6 days Hands on Training on

Network Security and Ethical Hacking

Dec 16-21, 2019, 10.00 AM to 5.00 PM

The design and implementation of energy efficient future generation communication and networking technologies also require the clever research. Advances in Computer Communications and Networks: from Green, Mobile, Pervasive Networking to Big Data Computing require strong base in the area of networking. Emerging threats emphasize the need for real-world assessment of an organization's security posture. To bring awareness to our students about this most sought field in the engineering domain we are providing the platform by arranging a student's development program on Network Security and Ethical Hacking.

Objectives:

- Learn about network concept and designing of network for organization.
- Hands-on experience of Ethical Hacking tools using Kali Linux.
- Practical real time demonstration of the latest Hacking Techniques, methodologies, tools.

Course Contents:

- Introduction to Computer Network and Security
- Routing and Switching protocol.
- Introduction to Ethical hacking, Network sniffing and spoofing tools.
- Exploitation tools- Metasploit, Password cracking and Steganography.

Who Should Attend: Any student from SE (all branches)

Course Fees: Free for SIES GST students / Others Rs.1000

Certification: in collaboration with 9thLegend Inc.

Internship: At the end of 5 days program participants will undergo 15 days internship covering developing secure web applications, identification of security threats and developing the security solution for various organizations (For ex: Bank Sector/Medical Sector/Insurance/IT Sector).

Outcome: This SDP is designed to provide solution of organizations Network structure.

- This SDP will give insight on various routing and switching technology.
- This SDP will provide base for certificated ethical hacker, certified penetration tester.

Contact for Registration:

Prof. Aparna Bannore: bannore.aparna@siesgst.ac.in, 9920809635

Prof. SuvarnaChaire: suvarna.kendre@siesgst.ac.in, 9769455405

Students Development Program on Network Security and Ethical Hacking

(Dec 2019)

Day wise schedule

Day	Session1 9:30-11.00	Session2 11:30-1.00	Session3 1.45 - 3:30	Session 4 4:00-500	feedback
Day1 16/12/2019	Introduction to Computer Network (OSI model/TCP Model/Devices at each layer KNP	/IP addressing/Subnetting) KNP	CISCO topology built up SKP	Static routing SKP	quiz
Day 2 17/12/2019	Dynamic Routing, Switching <i>Basic configuration of Layer 2 manageable switch</i> UNR	Switching UNR	D-Link <i>Basic configuration of Layer 2 manageable switch</i> SKP		Quiz
Day 3 18/12/2019	Introduction to security Ethical hacking Aparna Bannore	Initial Commands demonstration and handson 1)Dig 2)whois 3)tracert 4)ifconfig	Sniffing using wireshark Tepdump +Assignment on sniffing Suvarna VChaure	Assignment on sniffing SVC	
Day4 19/12/2019	Kali linux installation Backtrack Metasploit AMB	Exploiting winxp system	Virus, steganography KNP	Key logger Lab work KNP	
Day5 20/12/2019	SQL injection UNR	SQL map UNR	Vulnerability assessment using Nessus UNR	Quiz	
Day 6 21/12/2019	Network Spoofing using nmap, Zenmap Amb	Password cracking John the ripper SVC			

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Network Security and Ethical Hacking

Dec, 2019

List of Project

Sr. no	Title of Project	Student Name	Name of faculty	Signature
01	Angry IP scanner(Windows OS)	Anagha Jadhav Roma Rai	Ujwala R	
02	John the Ripper (Kali Linux)	Shaikh Nifa Damian Pillai	Suvarna C	
03	Demonstration of Burp Suite	Aditya Borude Sakshi Mahadik	Suvarna C	
04	Keyloggers (windows OS)	Deepthi S Thrishapriya S	Kalyani P	
05	Metasploit: for hacking windows XP system using Kali linux	Sonali Sarkar		

		Priyanka Paulraj	Aparna B	
06	Steganography on image using kali linux	Vineet Anant Iyer Vignesh Mudaliar	Kalyani P	
07	Steganography using windows Os using Openstego	Artha Pillai Sachi Patankar	Kalyani P	
08	Web vulnerability scanner :netSparkar	Nambi Yadav Arun Kumar Pandi	Ujwala R	
09.	Network miner	Vishak Kodethur Tushant Gokhe	Suvarna C	

List of Project

Sr. no	Title of Project	Student Name	Name of faculty	Certificate No.
01	Angry IP scanner(Windows OS)	Anagha Jadhav Roma Rai	Ujwala R	CR No.CE/SH2019/SDP/27 CR No.CE/SH2019/SDP/28
02	John the Ripper (Kali Linux)	Shaikh Nifa Damian Pillai	Suvarna C	CR No.CE/SH2019/SDP/29 CR No.CE/SH2019/SDP/30
03	Demonstration of Burp Suite	Aditya Borude Sakshi Mahadik	Suvarna C	CR No.CE/SH2019/SDP/31 CR No.CE/SH2019/SDP/32
04	Keyloggers (windows OS)	Deepthi S Thrishapriya S	Kalyani P	CR No.CE/SH2019/SDP/33 CR No.CE/SH2019/SDP/34

05	Metasploit: for hacking windows XP system using Kali linux	Sonali Sarkar Priyanka Paulraj	Aparna B	CR No.CE/SH2019/SDP/35 CR No.CE/SH2019/SDP/36
06	Steganography on image using kali linux	Vineet Anant Iyer Vignesh Mudaliar	Kalyani P	CR No.CE/SH2019/SDP/37 CR No.CE/SH2019/SDP/38
07	Steganography using windows Os using Openstego	Artha Pillai Sachi Patankar	Kalyani P	CR No.CE/SH2019/SDP/39 CR No.CE/SH2019/SDP/40
08	Web vulnerability scanner :netSparkar	Nambi Yadav Arun Kumar Pandi	Ujwala R	CR No.CE/SH2019/SDP/41 CR No.CE/SH2019/SDP/42
09.	Network miner	Vishak Kodethur Tushant Gokhe	Suvarna C	CR No.CE/SH2019/SDP/43 CR No.CE/SH2019/SDP/44

Certificate:

9th
Legend



CR No.CE/

CERTIFICATE OF COMPLETION

This is to certify that

Mr./Ms. _____

*has successfully completed the course on
“Network Security and Ethical Hacking”*

*and fifteen days internship from 16th Dec to 21st Dec, 2019 held at
SIES Graduate School of Technology. During internship he/she has successfully
completed project titled _____.*

MS, SUVARNA CHAURE
COURSE COORDINATOR

DR. APARNA BANNORE
HOD, CE DEPT.

DR. ATUL KEMKAR
PRINCIPAL, SIES GST