

# **SCSVMV UNIVERSITY**

## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### **Report on Project Oriented Training & Internship Program on Networking- CCNA(R&S) – 31/01/2019 to 06/02/2019**

GEEKisthan Student Technical club of CSE department, SCSVMV University in Association with AZURESKYNET Solutions and IIT-HYDERABAD organized Hands-on training program on Networking(R&S) from 31<sup>st</sup> of January to 6th of February, 2019.

#### **COURSE GOALS AND OBJECTIVES:**

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Labs use a “model Internet” to allow students to analyze real data without affecting production networks. Packet Tracer (PT) activities help students analyze protocol and network operation and build small networks in a simulated environment. At the end of the course, students build simple LAN topologies by applying basic principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes.

#### **Resource Person:**

**NOOR ALAM (Cyber Security Expert)**

Number of hours conducted: 45

Mode of training: Hands-On

**Topics covered:**

1. Internetworking
2. The OSI Reference Model
3. Ethernet Networking and Data Encapsulation
4. Introduction to TCP/IP
5. Subnetting
6. VLSMs, Summarization, and Troubleshooting
7. Cisco's Internetworking Operating System (IOS)
8. Managing a CISCO Internetwork
9. IP Routing
10. Open Shortest Path First (OSPF)
11. Layer 2 Switching
12. VLANs and InterVLAN Routing
13. Security
14. Network Address Translation (NAT)
15. Internet Protocol Version 6 (IPv6)
16. Troubleshooting IP, IPv6, and VLANs
17. Enhanced IGRP
18. Wide Area Networks

**Projects carried out:**

1. Configuring Application Layer Services of the OSI Model
2. IP Packet Analysis using WIRESHARK
3. Intra-Department Lab Network using RIP Routing
4. Office Area Network using Static Routing
5. College Network using EIGRP
6. Creating Virtual Local-Area Network
7. Controlling Traffic using Access Control List

The participants will be getting:

1. Training Certificate
2. Project Letter (for 7 projects)
3. Internship Letter (of 1 month)

The feedback of every student who attended the program was splendid. They were very satisfied of what they have spent on this program. And even they are interested in attending such kind of Technical training programs which will enhance their skills.

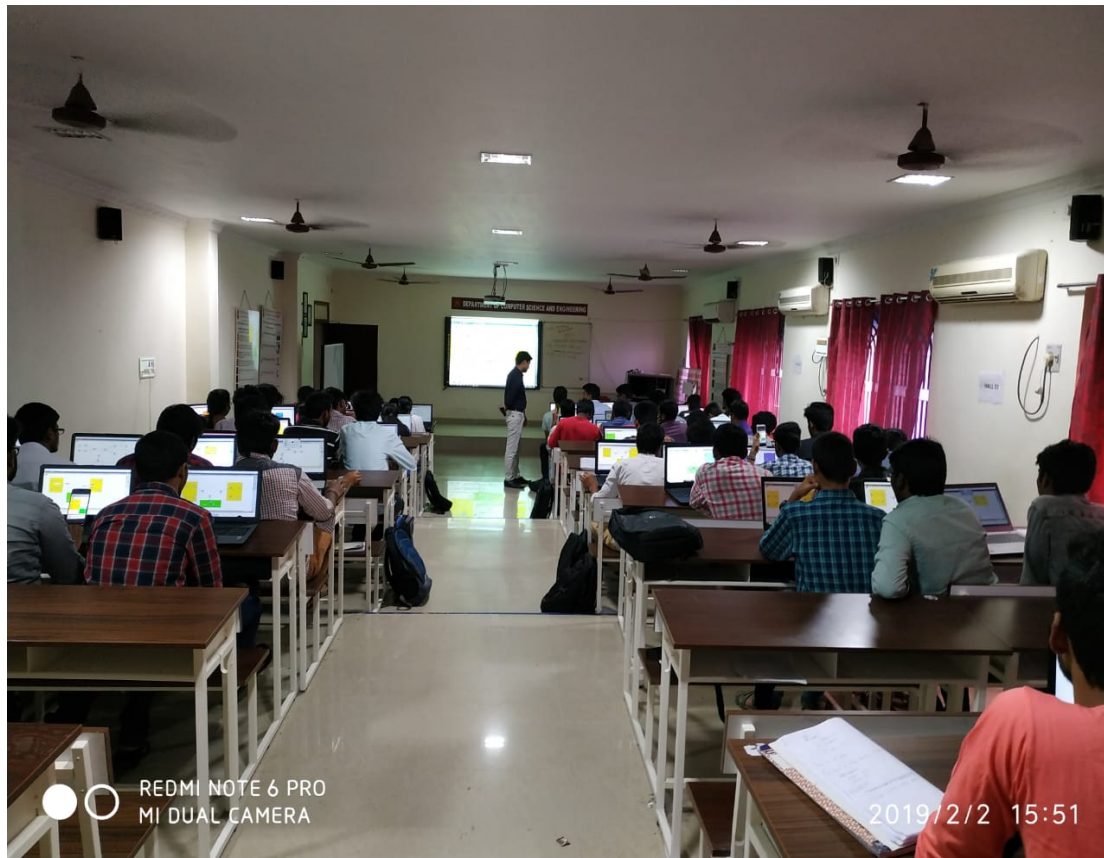
Overall, the program was successfully organised by Geekisthan Student Technical club . This training Program helps the students to gain immense knowledge on the trendy technologies.

**Faculty Coordinators**

1. Mrs.R.Prema AP/CSE
2. Mr.Nagendra Panini Challa AP/CSE
- 3.

**Student Coordinators:**

11179A030- Bolla Bheeshma Reddy	II BE CSE
11179A012- Akumalla Sai Prathyush	II BE CSE
11179A020- G. Arvind	II BE CSE
11179A004- Adarsh K. Iyengar	II BE CSE
11179A008- Ajay Gour	II BE CSE
11169A212- Venkata Naga Sai Praneeth.M	III BE CSE



Expert talk by **Noor alam** about “Troubleshooting IP, IPv6, and VLANs”



A view of participants during Hands on Lab Session conducted



Expert talk by **Noor alam** about "Organization of the Network Protocols and their working through WireShark".