The **Communication Networks Laboratory** is established to provide students with practical knowledge and hands-on experience in computer networking, network security, data communication, and secure network configuration. The laboratory enables students to understand the fundamental concepts of network security, communication protocols, routing, switching, network vulnerabilities, and security threats.

The laboratory provides facilities for configuring, testing, and securing network topologies using routers, switches, computers, and networking software. Students gain practical experience in IP addressing, subnetting, VLAN configuration, routing protocols, firewall configuration, Access Control Lists (ACLs), network traffic analysis, packet filtering, intrusion detection, and network security mechanisms. They also perform experiments related to encryption, authentication, secure communication, and the identification and mitigation of common network attacks.

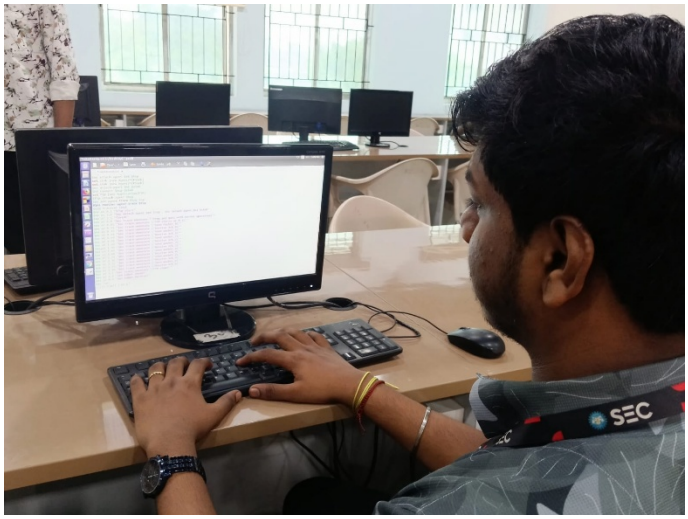
The laboratory helps students develop problem-solving, analytical, and technical skills required for designing, implementing, monitoring, and securing computer networks. These practical sessions enhance students' ability to identify network vulnerabilities, implement appropriate security measures, troubleshoot security issues, and develop secure network infrastructures for real-world applications.

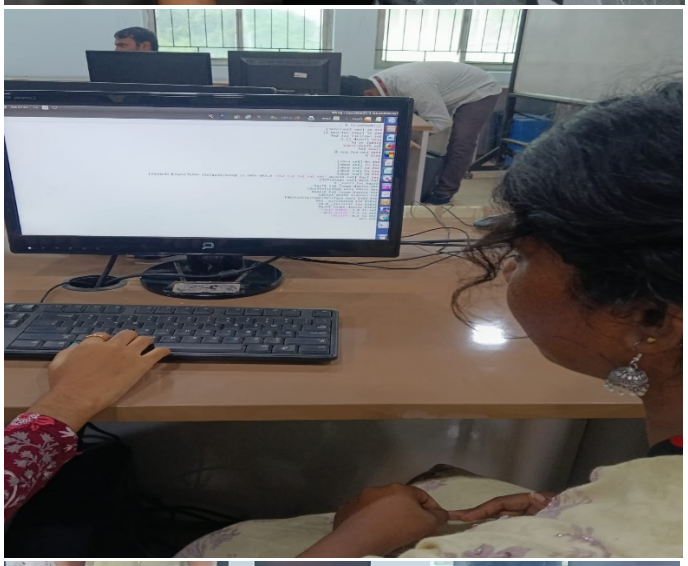
Equipment in Networks Laboratory

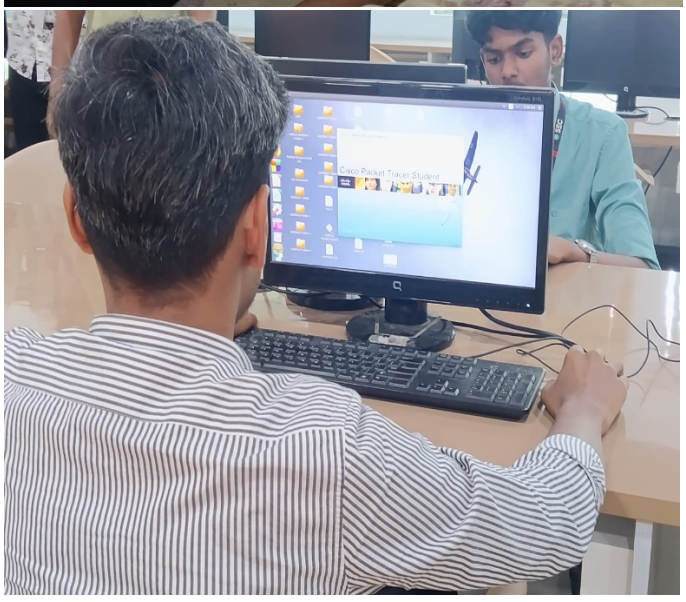
1. Ethernet lan trainer
2. Wireless lan trainer
3. Cisco router
4. Cisco 2900 series switches
5. Desktop computer

Tools in Networks Laboratory

1. Cisco Packet Tracer
2. Wireshark for packet capture and protocol analysis
3. NS2/NS3
4. Python, C Compiler, Visual Studio Code


SEC




Cisco Packet Tracer Student