



Certificate Course on

Basic Network Administration with Switching and Routing

Organised by Computer and Information Technology Centre
Indian Institute of Technology Indore
Course Coordinator: Dr. Neminath Hubballi

Course Introduction

With the increased reliance on Internet for various day-to-day activities, it becomes essential to manage networks effectively without downtime and issues. An integral part of network administration is configuring, managing various network equipment like Switches and Routers. This certificate course will introduce and give necessary hands-on experience of Switching and Routing.

Who should attend?

Fresh engineering graduates, diploma holders aspiring for a career in computer network management. Students of CSE or IT who are in 3rd and final year of their degree program having passion for networking. IT professionals working in industries.

Number of Seats: Limited.

Course Dates: April 21-24, 2021

Online registration at <http://www.iiti.ac.in/registration>

Fee: INR 3000 +540 GST =3540/-

Course Content

DAY	TIME	TOPICS
1	10:00-12:30	Understanding basic concepts and functions of network components (Routers, L2 and L3 switches, Next-generation Firewalls, Access points, wireless Controllers). Overview of Switching, Local Area Network, Virtual LAN.
	14:30-17:00	Creating a LAN with layer 2 switches (different topologies), Demonstration of various commands used to configure Layer 2 switches. Demonstration of Virtual LAN creation, Working of Spanning Tree Protocol.
2	10:00 12:30	Switching Fabric, Ternary Content Addressable Memory, Types of Switches (Ethernet, Fiber Optic) and ports, Optical Fiber communication.
	14:30-17:00	Demonstration of different types of ports in switches. Optical Transceiver (Small Form Factor).
3	10:00-12:30	Overview of Routing, Subnetting and Supernetting, Private and Public IP addresses, Network Address Translation, Routing Algorithms, Distance Vector Routing.
	14:30-17:00	Configuring a subnet network, Verifying the Routing table, Basic Router configuration.
4	10:00-12:30	Routing Information Protocol, Overview of OSPF, Overview of BGP.
	14:30-17:00	Implementing NAT with a router, Implementing Basic access control list with router.

Address for correspondence:

Computer and Information Technology Center
Indian Institute of Technology Indore
Khandwa Road, Simrol, Indore, MP.
E-mail : computer.center@iiti.ac.in