

DATE: 09/09/2021

## Event Coordinator(s)

**1. Prof. Suvarna Bhoir**

## Guest Speaker

**Dr. Nilesh M. Patil**

## Time & Place:

**10 PM to 11:30 PM**

**Google Meet**

## Department:

**Information Technology**

**No of participant:52**

The event's key objective is to provide students with in-depth knowledge of Enterprise Network Design by explaining various case studies. Students of BE IT class have Enterprise Network subject in their curriculum; hence the lecture helps students learn about the steps to design the architecture of the different network designs.

The session was very informative for the students as the speaker Dr. Nilesh M. Patil, Assistant Professor, FRCRCE, helps them understand the basic steps of building the architecture of any network design. The speaker started the session by introducing the basic definition of an Enterprise Network Design as the backbone for facilitating an organization's communications and connecting computers and devices throughout departments. The Enterprise Network consists of routers, switches, and Wireless Access Point. The speaker then mentioned the Campus Network Design Models, which typically consists of three layers, the Core layer, Distribution Layer, and Access Layer. The speaker then brought up the steps to build the architecture of network design. It consists of different steps such as functional areas and high-level modules, network devices required, floorwise plan, arrangement according to the campus core, access layer and distribution layer, firewall configuration, enterprise edge, and ISP connectivity, expenditure on buying equipment, remote site connectivity, IP Addressing and routing protocol for Organization.

The speaker then began a hands-on session on the Oracle VM VirtualBox Manager to show the working of Mininet, which is an alternative use for the Cisco Packet Tracer. The speaker mentioned that a single command like sudo mn could help us run a real kernel, switch, and application code on a single machine. The help command helps to view all the documented commands such as EOF, nodes, dump and many more. The speaker also encouraged the students to explore more about Android Enterprise Network Design that would be beneficial for the projects.

## **The Video Recording Link :**

<https://drive.google.com/file/d/1AvEMLzwh2GdsHpN2eLb2W3xmhbsaFJTE/view?usp=sharing>

## **Student Feedback and Benefits**

The students had an enjoyable time learning about Enterprise Network Design and gained new ideas which they can in turn now implement in their END Projects. The session also influenced some of the students to explore Mininet for designing an architecture. The lecture was very informative and interesting which caught the student's attention throughout the session.

Sd/-  
Prof. Suvarna Arango  
Asst. Prof.,IT

Sd/-  
Prof. Meena Ugale  
HOD, IT

Sd/-  
Dr. Y.D. Venkatesh  
Principal

## Photos

REC Nilesh M. Patil CRCE is presenting

### WHAT IS AN ENTERPRISE NETWORK?

- An enterprise network is the backbone for facilitating an organization's communications and connecting computers and devices throughout departments.
- An enterprise network environment is usually configured to facilitate access to data and insight into analytics.

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REC Nilesh M. Patil CRCE is presenting

### Campus Network Design Models

Figure 3-1 Three-Tier Network Design Model

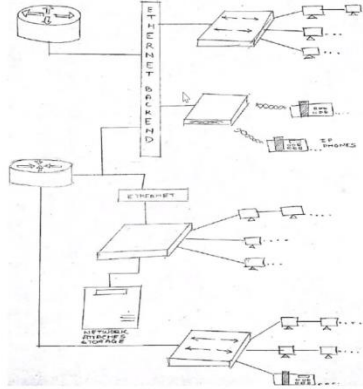
A typical hierarchical enterprise campus network design includes the following three layers:

- **Core layer:** Provides optimal transport between sites and high-performance routing. Due to the criticality of the core layer, the design principles of the core should provide an appropriate level of resilience that offers the ability to recover quickly and smoothly after any network failure event with the core block.
- **Distribution layer:** Provides policy-based connectivity and boundary control between the access and core layers.
- **Access layer:** Provides workgroup/user access to the network.

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# 4. Floorwise Plan

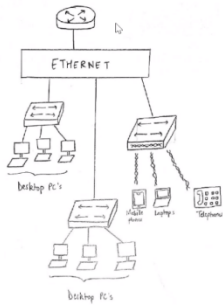
Customer Service Department



Niles M.Patil CR...	Melvin Raju	Suvarna Bhoir
Kaustubh Upadhy...	Aditi Pathare	Sachin Dwivedi
Dhruv Darji	Ankur Foujdar	Shreegunj Varia
Darshan Bhanushali	33 others	You

10:54 AM | b5qwx4ndbx

# Information Technology Department



Suvarna Bhoir	Niles M.Patil CRCE	Melvin Raju
Kaustubh Upadhy...	Aditi Pathare	Sachin Dwivedi
Dhruv Darji	Ankur Foujdar	Shreegunj Varia
Darshan Bhanushali	34 others	You

11:02 AM | b5qwx4ndbx

