

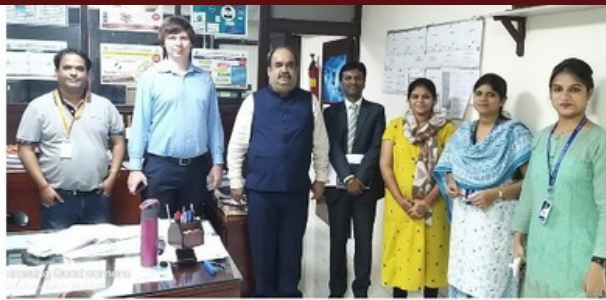


# A. P. Shah Institute of Technology

Kasarvadavali, Ghodbandar Road, Thane(W)

Pin-400615, Maharashtra, India

## KNOW YOUR LAB'S



## DEPARTMENT OF INFORMATION TECHNOLOGY





# A. P. Shah Institute of Technology

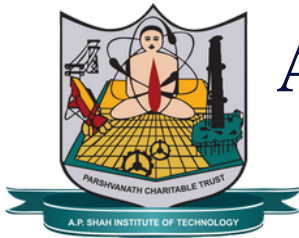
Kasarvadavali, Ghodbandar Road, Thane(W)

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## INDEX

Lab No.	Lab Name	Page No.
301	Software Development & Operations	04
302	Network Design & Analysis	06
303	Operating System Design	08
309	Algorithms & Complexity Theory	10
313	System & Network Security	12
317	Open Source Technologies	14
318	Centralized Server Room	16





# A. P. Shah Institute of Technology

Kasarvadavali, Ghodbandar Road, Thane(W)

Pin-400615, Maharashtra, India

## Vision and Mission

### Institute Vision

APSIT aspires to be a premier institute producing globally competent engineering professionals to contribute towards socio-economic growth of India.

### Institute Mission

To provide conducive and collaborative environment to meet contemporary & future Engineering challenges by project based and value-added education with the support of trained faculty.

### Department Vision

To be a prime center of excellence by transforming students into globally competent IT professionals.

### Department Mission

1. To develop, support and maintain state-of-art infrastructure to serve as a potent resource hub for IT industries.
2. To inculcate the problem solving, analytical, logical skills and to promote the culture of creativity and innovation among the students.
3. To adapt with the transformation of the technology emphasizing on interdisciplinary studies, exposure to emerging technologies and imbibing high standards of professional ethics and social responsibilities in all endeavors.

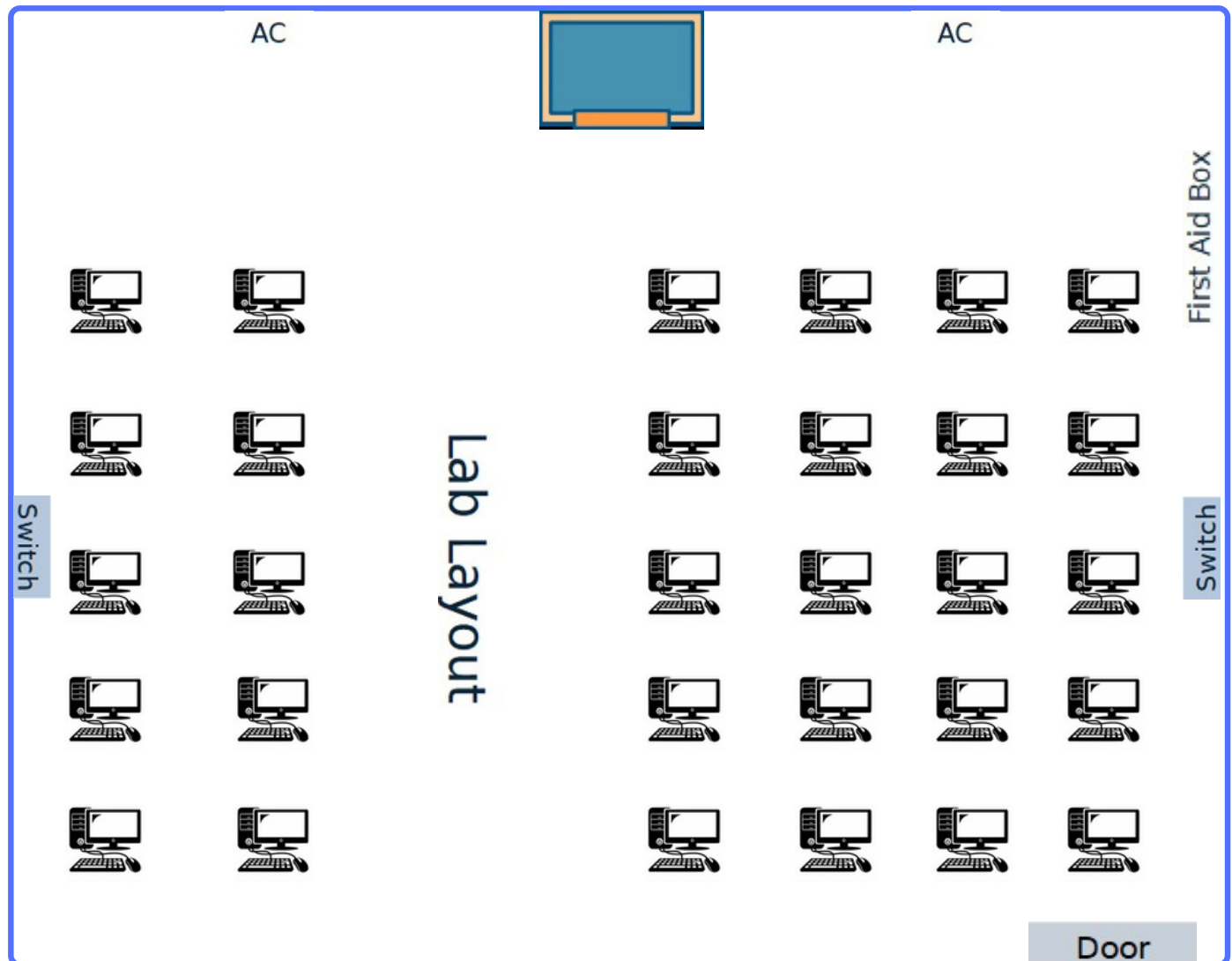


# A. P. Shah Institute of Technology, Thane

DEPARTMENT OF INFORMATION TECHNOLOGY

**LAB NO**  
**301**

## Software Development & Operations



### Basic Configuration

30 machines with 16GB RAM & Intel core i7 Processor

### Software's

- TensorFlow
- Kile
- Planner
- Android Studio
- Eclipse IDE

Lab Area: 83.71 sq. mts.

Number of Systems: 30

Lab Cost : 15,56,125/-

Name of the Lab Incharge  
Prof. Rujata Chaudhari





# A. P. Shah Institute of Technology, Thane

DEPARTMENT OF INFORMATION TECHNOLOGY

**LAB NO**  
**301**

## **Software Development & Operations**

Software Development & Operations Lab aims at giving exposure to students to an environment where building, testing, and releasing software can happen rapidly, frequently and more reliably. It also emphasises on modernizing, rebuilding & optimizing Apps and Infrastructure during Software Development and Deployment.



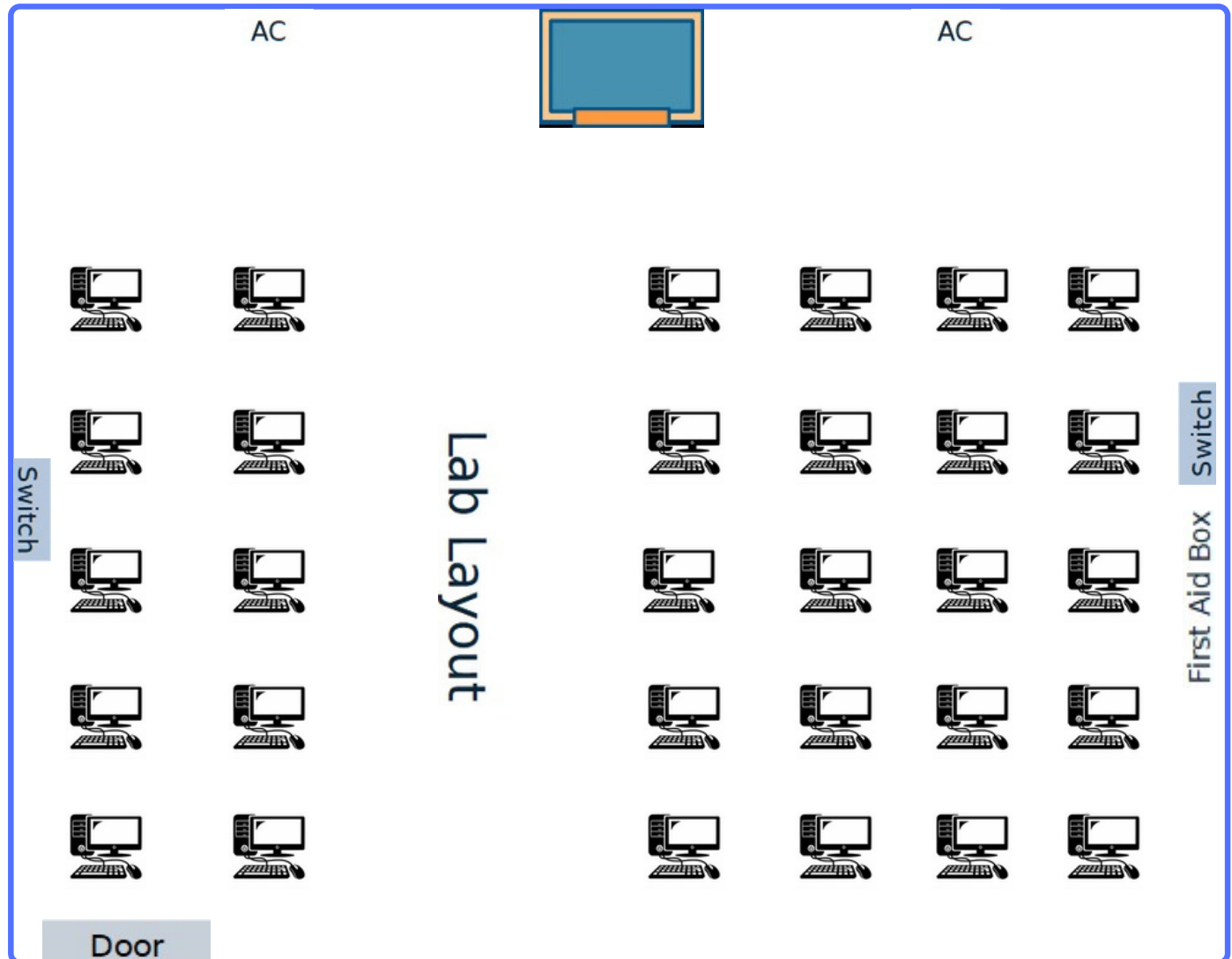


# A. P. Shah Institute of Technology, Thane

DEPARTMENT OF INFORMATION TECHNOLOGY

**LAB NO**  
**302**

## Network Design & Analysis



### Basic Configuration

30 machines with 8GB RAM  
& Intel core i5 Processor,

### Software's

- Wireshark
- Nmap
- NetKit
- Cisco Packet Tracer

Lab Area:82.94 sq. mts.

Number of System's: 30

Lab Cost :13,39,890/-

Name of the Lab Incharge  
Prof. Sonal Balpande



**LAB No**  
**302**

## Network Design & Analysis

The objective of Network Design and Analysis Lab is to demonstrate the basics of designing a network taking into consideration the users, services and locations of the hosts. It also focuses on optimizing design of Network through repeated simulations with the aid of Open source simulation tools like NS2.





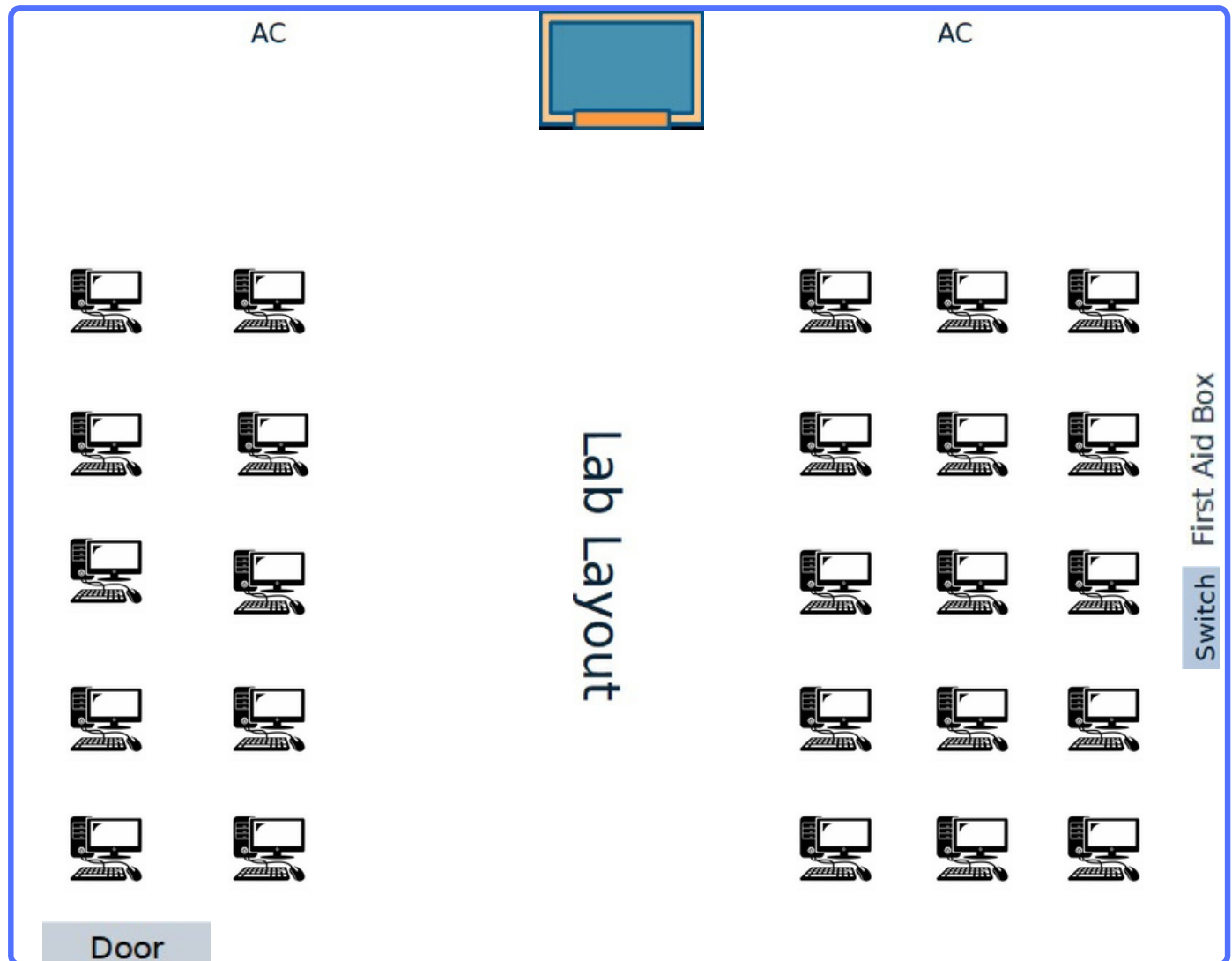


# A. P. Shah Institute of Technology, Thane

DEPARTMENT OF INFORMATION TECHNOLOGY

**LAB No**  
**303**

## Operating System Design



### Basic Configuration

25 machines with 8GB RAM  
& Intel core i5 Processor

### Software's

- Oracle Virtual Box
- MASM
- GCC
- JDK
- VMWare

Lab Area: 82.94 sq. mts.

Number of Systems: 25

Lab Cost : 11,16,575/-

Name of the Lab Incharge  
Prof. Sonal Jain





**LAB NO**

**303**

## Operating System Design

The objective of Operating System Design Lab is to let students understand and appreciate the principles in the design and implementation of operating systems. In this lab on Linux environment students get hands-on with the implementation of OS concepts. Lab assignments includes experiments on understanding, customizing booting procedure of Operating Systems & experiments on Network Installation, VNC Installation, Clone Installation of OS.





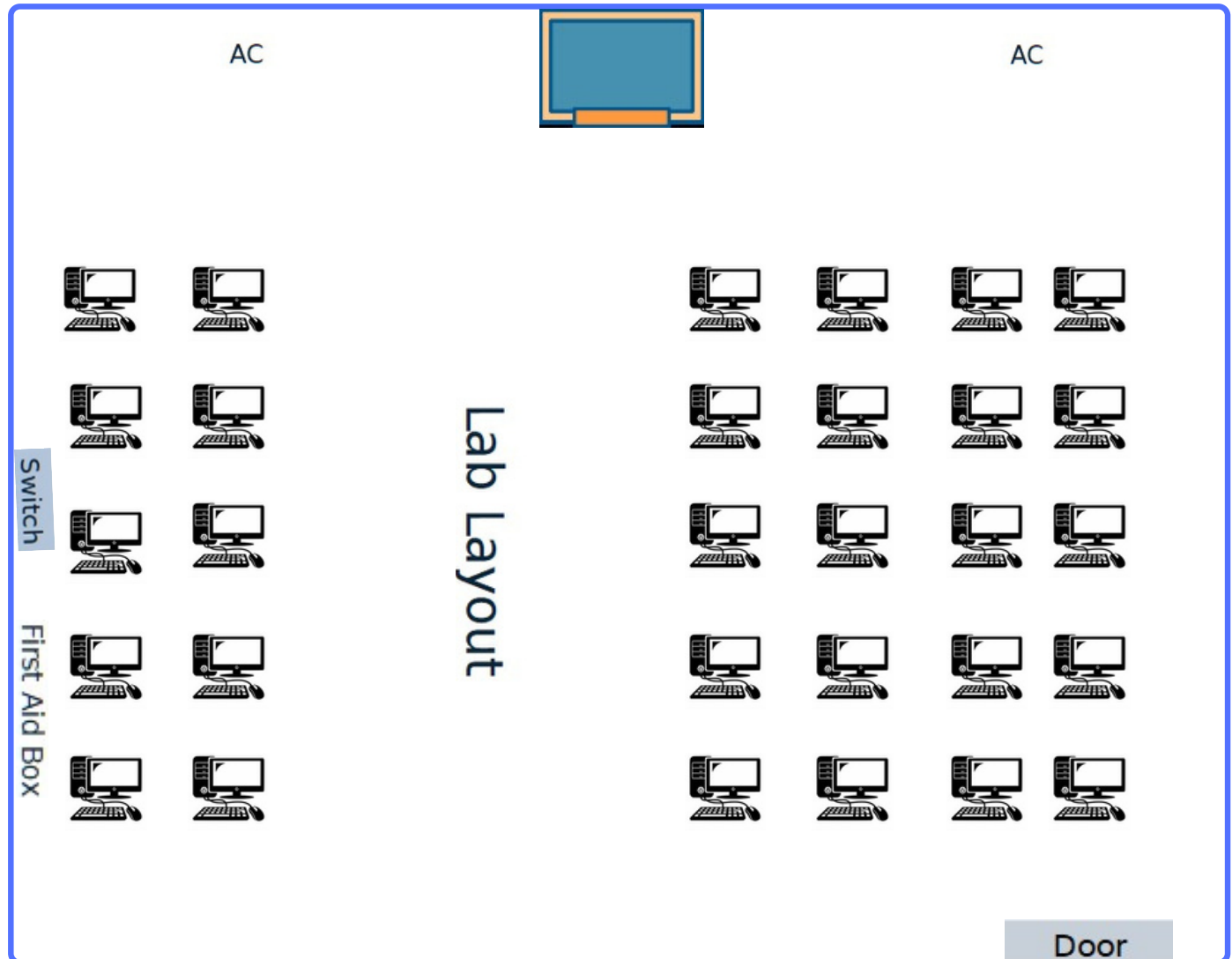
# A. P. Shah Institute of Technology, Thane

DEPARTMENT OF INFORMATION TECHNOLOGY

LAB No

309

## Algorithms & Complexity Theory



### Basic Configuration

30 machines with 8GB RAM  
& Intel core i5 Processor

### Software's

- DOSEMU
- Python
- PDB
- JDK
- GCC

Lab Area: 82.94 sq. mts.

Number of Systems: 30

Lab Cost : 13,39,890/-

Name of the Lab Incharge  
Prof. Geetanjali Kalme



**LAB NO**  
**309**

## Algorithms & Complexity Theory

Algorithms and Complexity Theory Lab Focuses on providing environment where students can determine the inherent difficulty of computational problems, classifying problems according to their inherent difficulty, designing and analyzing algorithms that use computational resources as efficiently as possible.







# A. P. Shah Institute of Technology, Thane

## DEPARTMENT OF INFORMATION TECHNOLOGY

LAB NO

313

### System & Network Security



#### Basic Configuration

24 machines with 8 GB RAM & Intel core i5 Processor

#### Software's

- MySQL
- PostgreSQL
- CrypTool
- Nessus

Lab Area: 78.65 sq. mts.

Number of Systems: 24

Lab Cost : 10,97,229.6/-

Name of the Lab Incharge  
Prof. Neha Deshmukh





**LAB NO**

**313**

## **System & Network Security**

System & Network Security Lab focuses on articulating the need for Cyber security in computer systems, networks, and world wide web. It also focuses on Demonstration & Orchestration of various threat scenarios, Network attacks. This Lab also gives emphasis on discovering cyber security holes in standard networking protocols such as TCP/IP, ARP, DNS, Ethernet, BGP etc, & demonstrating mitigation methods for same.



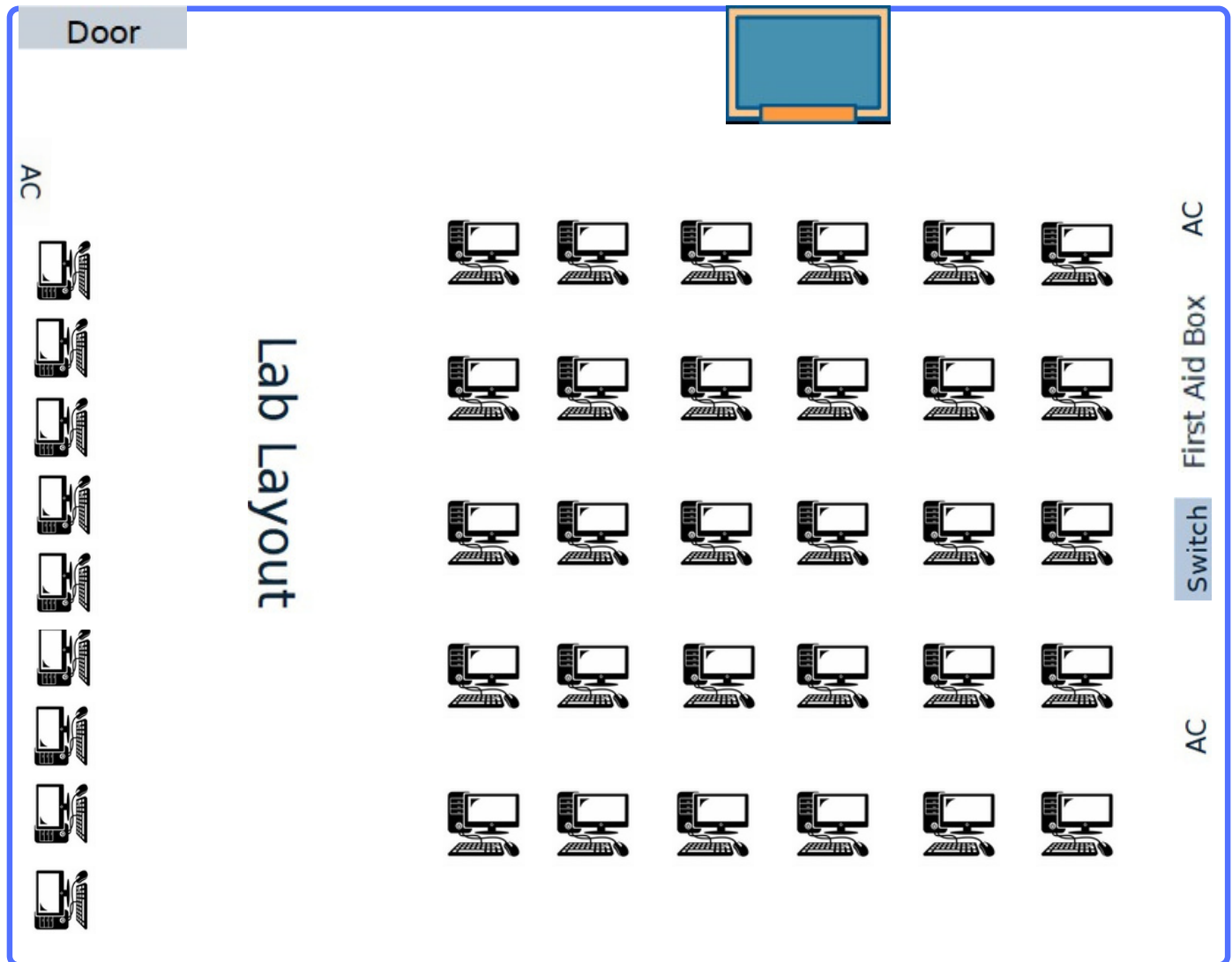


# A. P. Shah Institute of Technology, Thane

DEPARTMENT OF INFORMATION TECHNOLOGY

**LAB NO**  
**317**

## Open Source Technologies



### Basic Configuration

30 machines with 8GB RAM & Intel core i5 Processor, 5 machines with 16 GB RAM & Intel Core i7 processor & 4 iOS Systems

### Software's

- Docker
- ELK Stack
- NGINX
- Nagios

Lab Area: 122.32 sq. mts.

Number of System's: 30

Lab Cost : 2220642/-

Name of the Lab Incharge  
Prof. Yaminee Patil





**LAB NO**  
**317**

## Open Source Technologies

Open Source Technologies Lab aims at providing knowledge of emerging open source technologies to Students and expose students to open source software's. This lab is also a initiative named as Open Source Experimental Lab which is a collaborative effort of APSIT and ASHNIK PTE LTD Singapore to impart skills in the areas of open source technologies including Database, Docker, Elastic Stack, NGINX, Cloud Computing to develop necessary industry skills.





**LAB No**

**318**

### **Centralized Server Room**

APSIT offers comprehensive IT facilities and services, supported by a state-of-the-art networking environment. Networking Environment is designed to enhance learning, research, teaching, and administrative processes for all stakeholders. The entire Intranet is facilitated with structured cabling & wireless connectivity, ensuring that all departments are connected to a centralized server room either through wired or wireless means.

To facilitate Internet/Internet connectivity, APSIT has deployed over 80 Gigabit Ethernet switches, 70 WI-FI 5/6 routers which enable more than 1000 workstations/nodes, 500 Laptops on campus to connect to Centralized Server Room. This high-speed connectivity ensures efficient communication and data transfer within the campus network.

APSIT boasts a centralized server room that houses dedicated servers accessible over Intranet / Internet, L3 switches, firewalls, and gateways. This setup provides the essential infrastructure for the network and ensures secure and reliable connectivity for all users. To prevent disruptions, the campus network & IT infrastructure is backed up by an uninterruptible power supply (UPS) with a capacity of 190 KVA. This backup power is provided through an online UPS system from Vertiv (180 KVA) and APC (10 KVA), ensuring continuous connectivity to the internet and uninterrupted access to network resources.







**LAB No**  
**318**

### Centralized Server Room

Additionally, APSIT has implemented a comprehensive CCTV network that is streamed over the intranet and internet. This network consists of over 200 IP cameras strategically placed throughout the campus to enhance security and monitor key areas.





# A. P. Shah Institute of Technology

## DEPARTMENT OF INFORMATION TECHNOLOGY







# A. P. Shah Institute of Technology

## DEPARTMENT OF INFORMATION TECHNOLOGY



It is a first of its kind effort to provide training and international certification on futuristic technologies under one roof to cater to need of students and technocrats working in the region of Maharashtra.



Shri. M. P. Poonia  
Former Vice Chairman AICTE

