VNR Vignana Jyothi Institute of Engineering and Technology

Infrastructure

Data Base Management Systems Laboratory

Background:

The lab provides the foundation of Database Management Systems in computer science engineering. This lab aims at providing students the knowledge about knowledge of SQL queries and relational algebra. Students are made familiar to construct database models for different database applications. This Laboratory is primarily aimed to meet the requirements of practical work meant for Apply normalization techniques for refining of databases. All basics of DBMS Queries and their characteristics, applications can be studied. This Lab will enable Students to practice various triggers, procedures, and cursors using PL/SQL.

Description:

DBMS Lab is special and well equipped with the latest systems installed with new software's. Students of various branches are facilitated to analyze the business requirements and producing a viable model for the implementation of the database. Guidance is provided to the students by a team of expert faculty and lab technicians. The labs are kept open after the college hours to enable the students to engage themselves to develop appropriate Databases to a given problem that integrates ethical, social, legal, and economic concerns.

Current Equipment:

The laboratory is well equipped with latest systems (i5 Processor,8GB, Ram,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating Systems so that they can execute their programs in different programming environments.

The lab is having one black board, projector, instructors table and Chairs, 6 fans, 6 lights, 07 windows for good Air circulation and good lighting facility. There are 18 set ups for doing experiments and two students are allotted for each set up.

Lab investment: RS. 21, 39, 960/-

Utilization:

This lab is utilized for conducting the following course(s):
19PC1CS04- Database Management System Laboratory

Location and Hours:

The Database Management System Laboratory is located in room no: B-005
Open Door Access: 9:00 AM - 6.30 PM
Scheduled classes take priority

Contact:

Dr. V. Prashanthi
   Assistant Professor,
prashanthi_v@vnrvjiet.in

A.Shobha
Lab Programmer,
shobha_a@ vnrvjiet.in

Advanced Predictive Analytics Laboratory

Background:

This Lab familiarizes the students with the fundamentals of Advanced Predictive Analytics Laboratory. This Lab is equipped witha wide range of systems, which helps the students to undergo intensive training and Analyze a problem, identify and define computing requirements, design and implement appropriate solutions

Description:

The lab is intended to Learn pre-processing method for multi-dimensional data andPractice on data cleaning mechanisms and Learn various data exploratory analysis and Develop the visualizations for clusters or partitions. Purpose of this lab is to make the students familiarized for problem, identify and define computing requirements, design and implement appropriate solutions. The facilities available in this lab is also used to build and test the student projects that involve in Advanced Predictive Analytics Laboratory.

Current Equipment:

This laboratory is fully equipped with The laboratory is well equipped with latest systems (i5 Processor, 8GB, Ram,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating   Systems so that they can execute their programs in different programming environments.

The lab is having one black board, projector, instructors table and Chairs, 6 fans, 6 lights, 07 windows for good Air circulation and good lighting facility. There are 18 set ups for doing experiments and two students are allotted for each set up.

Lab investment: Rs.**21,40,334/-**

Utilization:

This lab is utilized for conducting the following course(s):
Advanced Predictive Analytics Laboratory.

Location and Hours:
Advanced Predictive Analytics Laboratory is located in room no: B-006.
Open Door Access: 9:00 AM - 6.00 PM
Scheduled classes take priority

Contact:

P.Veeranjaneyulu
   Assistant Professor,
pagadalaveeru@gmail.com

A.Shobha
Lab Programmer,
shobha_a@ vnrvjiet.in

Object Oriented Programming Through Java Laboratory

Background:

Object-Oriented Programming or OOPs refers to languages that use objects in programming. It aims to implement real-world entities like inheritance, hiding, polymorphism, etc in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function. The OOPS lab presently serves to give the CSE-CS,DS students a laboratory experience in basic Practice object-oriented programs and build java applications .

Description:

The concepts of all Practice object-oriented programs and build java applications and to Implement java programs for establishing interfaces and develop sample programs for developing reusable software components.IN this lab Create database connectivity in java and implement GUI applications.. The training and experience that the students gain in this laboratory is to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity.
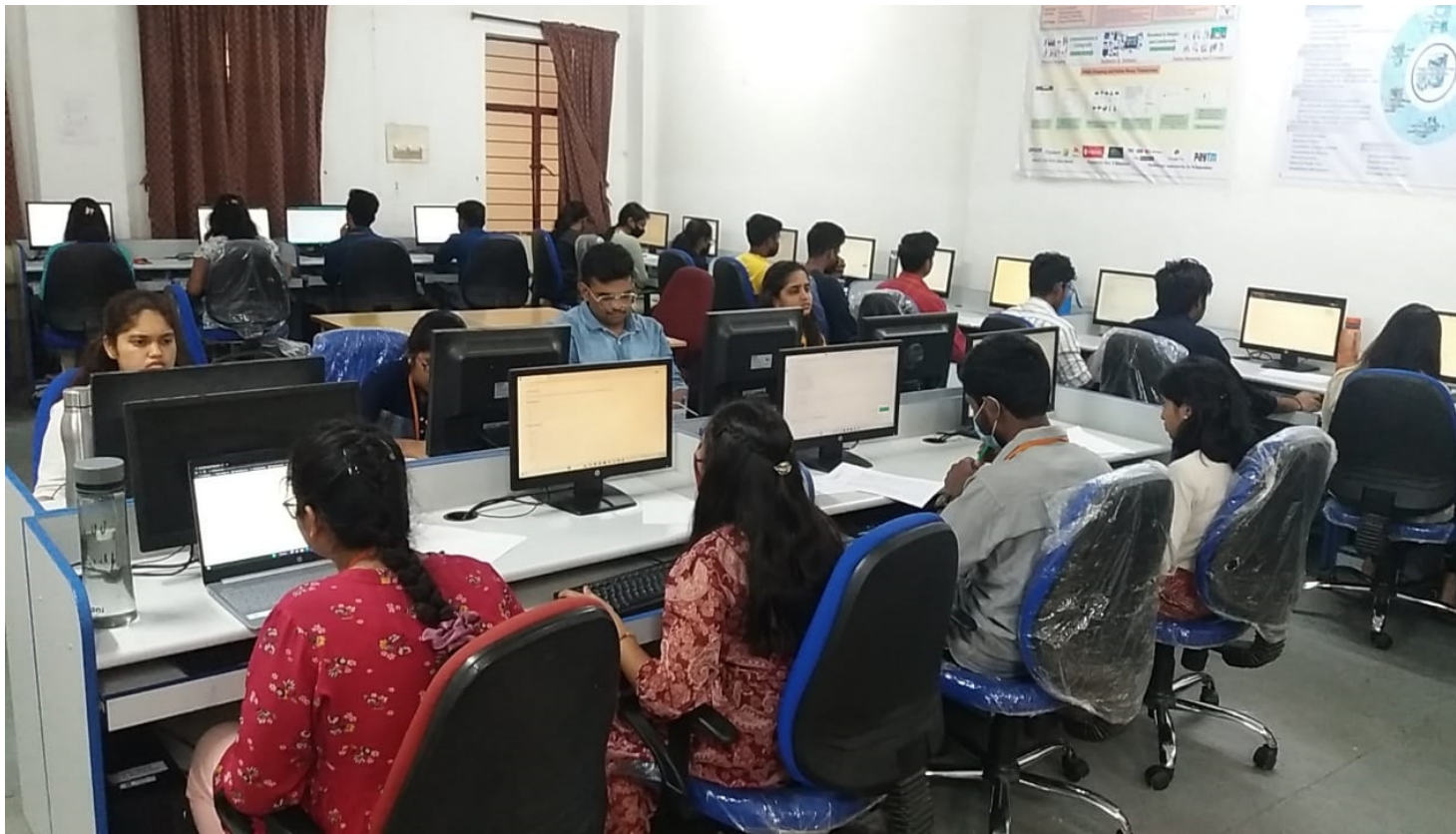
The Curriculum objectives are:
  To understand the basics of OOPs and features of C++ supporting object oriented programming
  To understand the dynamic allocation of objects and concept of friend
  To demonstrate the advanced object oriented programming features like inheritance polymorphism
      etc.
  To understand the usage of exception handling, File I/O, Standard template library.

Current Equipment:

 This laboratory is fully equipped with The laboratory is well equipped with latest systems (i5 Processor, 8GB, Ram,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating   Systems so that they can execute their programs in different programming environments.

The lab is having one black board, projector, instructors table and Chairs, 6 fans, 6 lights, 07 windows for good Air circulation and good lighting facility. There are 18 set ups for doing experiments and two students are allotted for each set up.

Lab investment: Rs.**22,37,784 /-**

Utilization:

This lab is utilized for conducting the following course(s):
19PC1IT01- Object Oriented Programming through Java
Laboratory

Location and Hours:
Object Oriented Programming Through Java Laboratory is located in room no: B-112/1.
Open Door Access: 9:00 AM - 6.30 PM
Scheduled classes take priority.

Contact People:
 Dr. T. Preethi,
   Assistant Professor,
preethi_t@vnrvjiet.in

Data Visualization Laboratory

Background:

The purpose of a Data Visualization Laboratory is to provide a dedicated space and resources for researchers, analysts, and data scientists to explore, analyze, and present data visually. It is a facility equipped with specialized hardware and software tools that enable the creation of visual representations of data sets, making it easier to understand patterns, trends, and insights that may not be immediately apparent in raw data. Data Visualization Laboratory is to enhance data analysis, communication, decision-making, collaboration, and research through the use of visual representations of data.

Description:

Data Visualization Laboratory is special and well equipped with the latest systems installed with new software. Students of various branches are facilitated to analyze the business requirements and produce a viable model for the implementation of the visualization tools. Guidance is provided to the students by a team of expert faculty and lab technicians. The labs are kept open after the college hours to enable the students to engage themselves to develop appropriate DataSets to a given problem that integrates ethical, social, legal, and economic concerns.

Current Equipment:

The laboratory is well equipped with latest systems (i7, 12700 Proc, 8GB, 512 SSD), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating Systems so that they can execute their programs in different programming environments.

The lab has one white board, magazine rack, projector, instructors table and Chairs, 2 fans,2,AC, 11 lights, 04 windows for good air circulation and a good lighting facility. There are 18 set ups for doing experiments and two students are allotted for each set up.

Lab investment: RS. 2101175/-

Utilization:

This lab is utilized for conducting the following course(s):

Data Visualization Laboratory

Location and Hours:

The Data Visualization Laboratory is located in room no:

Open Door Access: 9:00 AM - 6.30 PM

Scheduled classes take priority

Contact:
NAME: E.Lalitha
DESIGNATION:Asst Professor
**EMAIL ID:lalitha_e@vnrvjiet.in**

Foundations of Data Science Laboratory

Background:

The lab provides the Foundations of Data Science Laboratory in computer science engineering. This lab aims at providing students the knowledge about knowledge of Numpy and Pandas. Students are made familiar to apply and interpret fundamental concepts of Data Science. This Laboratory is primarily aimed to meet the requirements of practical work meant for Implementation of Basics and Advanced Data visualization. All basics of Data Science and their characteristics, applications can be studied. This Lab will enable Students to practice visualization of data using Line Plots, Bar Plots, Histograms, Density Plots and Scatter Plots.

Description:

Foundations of Data Science Lab is special and well equipped with the latest systems installed with new software's. Students of various branches are facilitated to analyze the business requirements and producing a viable model for the implementation of the Data Science. Guidance is provided to the students by a team of expert faculty and lab technicians. The labs are kept open after the college hours to enable the students to engage themselves to develop appropriate solution to a given problem that integrates ethical, social, legal, and economic concerns.
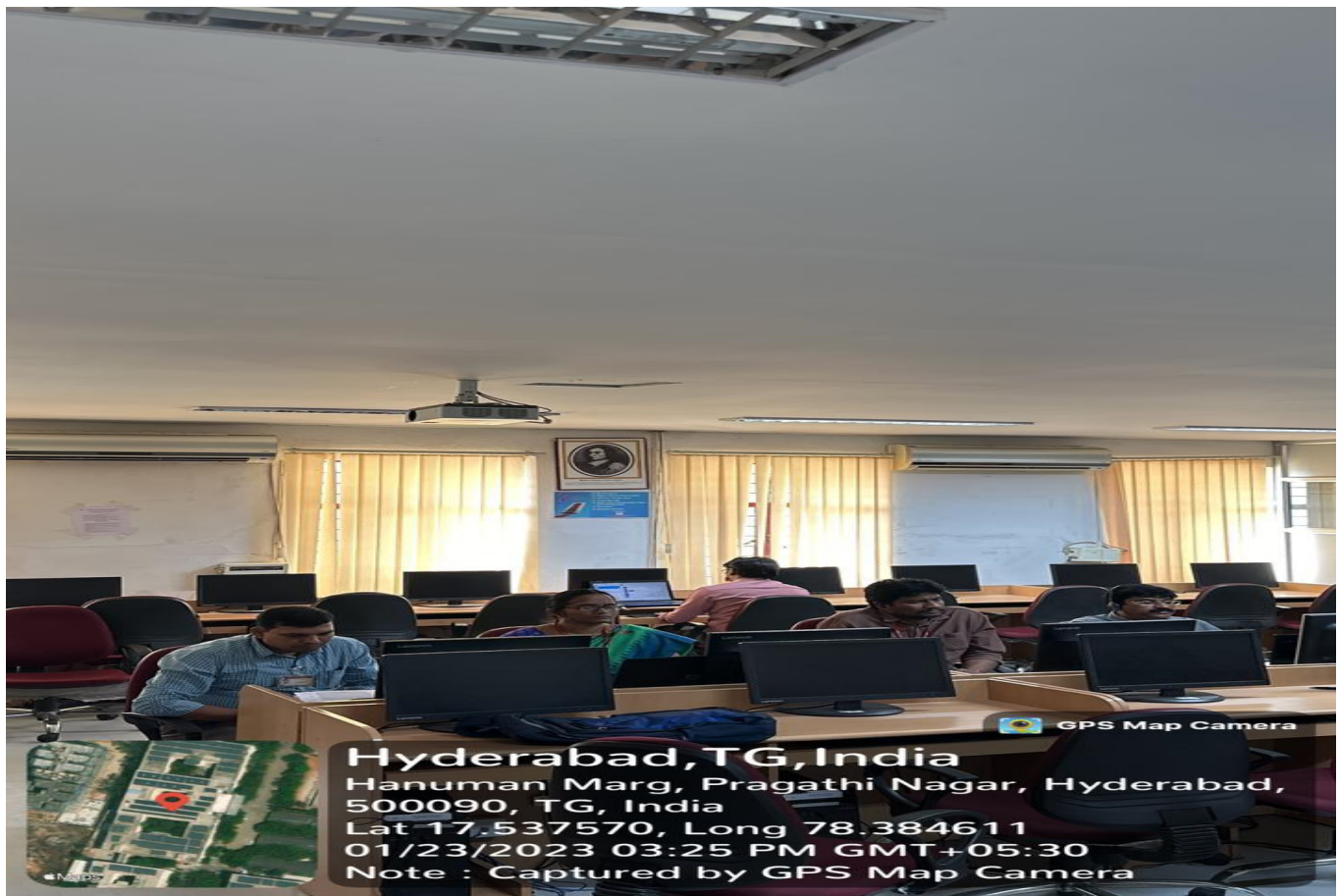
Current Equipment:

The laboratory is well equipped with latest systems (i3 Processor,8GB, Ram,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot as per their lab requirement. This is very useful for students because they are familiar with different Operating Systemsso that they can execute their programs in different programming environments.

The lab is having one black board, instructors table and Chairs, 2 fans, 9 lights, 4 windows and 3 Acs for good Air circulation and good lighting facility. There are 2 UPS for doing experiments and two students are allotted for each set up.

Lab investment: RS. 1885661/-

Utilization:

This lab is utilized for conducting the following course(s):
19PC2CS47- Foundations of Data Science Laboratory

Location and Hours:

The Foundations of Data Science Laboratory is located in
room no: C-105
Open Door Access: 9:00 AM - 6.30 PM
Scheduled classes take priority

Contact:
NAME: DEEPIKA BORGAONKAR
DESIGNATION: ASST. PROF.
EMAIL ID: deepika_b@vnrvjiet.in

2ND PERSON DETAILS
NAME: P. DEVIKA
DESIGNATION: ASST. PROF.
EMAIL ID: devika_p@vnrvjiet.in

Big Data Computing Laboratory

Background:

The purpose of the Big Data Lab is to educate students in all aspects of large and distributed information systems (e.g., system development, testing, maintenance, data security and privacy, data integration, networking, cyber security, and application development) and prepare them for highly skilled jobs in emerging and fast growing IT industries such as cloud computing, health care informatics, finance, data integration, and data analytics.

Description:

The Lab mainly houses necessary hardware platforms and software tools for the following domains of research in Big Data analytics: Healthcare Data Analytics, Agriculture Data Analytics, Financial Data Analytics, Computer Vision and Machine Learning.

Current Equipment:

The laboratory is well equipped with latest systems (i7 Processor,8GB, Ram,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating Systems so that they can execute their programs in different programming environments.

The lab is having one black board, projector, instructors table and Chairs, 3 fans, 6 lights, 07 windows forgood Air circulation and good lighting facility. There are 18 set ups for doing experiments and two students are allotted for each setup.

Lab investment: Rs.17,99,824/-

Utilization:

This lab is utilized for conducting the following course(s)
: 19PC2CS49 Big Data Computing Laboratory

Location and Hours:

The **Big Data Computing Laboratory** is located in lab no: C-106
Open Door Access: 9:00AM-6.30PM
Scheduled classes take priority

Contact:
NAME: Rasmita Kumari Mohanty
DESIGNATION: Assistant Professor
EMAIL ID: rasmitakumari_m@vnrvjiet.in

NAME: Gollapudi Mounika
DESIGNATION: Assistant Professor
EMAIL ID: mounika_g@vnrvjiet.in

Software Engineering & Operating Systems Laboratory

Background:

This course introduces concepts and techniques relevant to the production of large software systems. Students are taught a programming method based on the recognition and description of useful abstractions. Topics include modularity, specification, data abstraction, object modeling, design patterns, and testing. Students complete several programming projects of varying size, working individually and in groups.

Description:

Software engineering skills of any engineer become more important with the ongoing digitization and automation. Software engineering means not only delivering an implementation that fulfills the requirements and generates correct results. A second highly important aspect is to deliver software that can be maintained by multiple contributors, over months, years or even decades. This lifetime aspect and the number of developers contributing to the software introduces additional requirements and challenges in the development process. Software has to be testable, readable, and extendable. Concepts such as unit tests, code reviews,and continuous integration support writing software with these characteristics.

Background:

The earliest computers were mainframes that lacked any form of operating system. Each user had sole use of the machine for a scheduled period of time and would arrive at the computer with program and data, often on punched paper cards and magnetic or paper tape. The program would be loaded into the machine, and the machine would be set to work until the program completed or crashed. Programs could generally be debugged via a control panel using dials, toggle switches and panel lights.

Description:

Operating systems play key role in computer design and its infrastructure. All computer students must involve OS details to understand underlying structure and architecture of the common operating systems. OS lab provides a series of experiences which can help to perceive key concepts of operating systems and to be familiar how they work. In this course we focus on open source operating systems like UBUNTU to come up with each part of operating systems.

Current Equipment:

The laboratory is well equipped with latest systems (i5 Processor,8GB, Ram,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating Systems so that they can execute their programs in different programming environments.

The lab is having one black board, projector, instructors table and Chairs, 6 fans, 6 lights, 07 windows for good Air circulation and good lighting facility. There are 18 set ups for doing experiments and two students are allotted for each set up.

Lab investment: RS. 21, 39, 960/-

Utilization:

This lab is utilized for conducting the following course(s):
Software Engineering Laboratory

Location and Hours:

The Database Management System Laboratory is located in room no:
Open Door Access: 9:00 AM - 6.30 PM
Scheduled classes take priority

Contact:
NAME: G. Yedukondalu
DESIGNATION: Asst.Professor
EMAIL ID: Yedukondalu_g@vnrvjiet.in

Cyber Forensics Laboratory

Background:

Cyber forensics lab offers a practice of capturing, collecting, processing, analyzing, and reporting on digital data in a legally permissible approach. This part of cyber security mainly deals in detecting and preventing cybercrime and in any issues and incidents where evidence is stored in a digital format. The forensics investigators use specific methodologies where evidence regarding any crime is discovered and put forward in the Court of Law. This lab provides students an opportunity to learn and apply various tools that helps in investigations

Description:

A cyber forensics laboratory is a facility where digital evidence is collected, analyzed, and preserved for the purpose of investigating cybercrimes. Cybercrimes can include a wide range of offenses, such as hacking, data breaches, and online fraud. Cyber forensics laboratories are typically equipped with a variety of tools and equipment that can be used to collect and analyze digital evidence

Hyderabad, Telangana, India
P405, VJ hub, VNRVJIET, Whisper Valley, Hyderabad, Telangana 500090, India
Lat 17.536792°
Long 78.384376°
11/05/23 10:27 AM GMT +05:30

Current Equipment:

The laboratory is well equipped with latest systems (Intel(R) Core(TM) i7-10700 CPU @ 2.90GHz ,8GB RAM,1 TB Hard Disk), which are configured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating Systems so that they can execute their programs in different programming environments.

The lab is having one white board, projector, instructors table and Chairs, 6 fans, 6 lights, 06 windows for good Air circulation and good lighting facility. There are 36 systems available for doing experiments and one system is allotted for one students

Lab Investment: RS.21,39,960/-

Utilization:

This lab is utilized for conducting the following course(s):
19PC2CS65- Cyber Forensics Laboratory

Location and Hours:

The Cyber Forensics Laboratory is located in room no: P 401
Open Door Access: 9:00AM-6.30PM
Scheduled classes take priority

Contact:
NAME: Dr. P SUBHASH
DESIGNATION: Associate Professor
EMAIL ID: subhash_p@vnrvjiet.in

2ND PERSON DETAILS
NAME: Dr. V Prashanthi
DESIGNATION: Assistant Professor
EMAIL ID: prashanthi_v@vnrvjiet.in

Advanced Ethical Hacking Laboratory

Background:

An advanced ethical hacking laboratory is a specialized facility that is designed and equipped to simulate real-world cyber security scenarios and conduct advanced security testing. It provides a controlled environment where ethical hackers, also known as penetration testers or white hat hackers, can assess the vulnerabilities of computer systems, networks, and applications to identify potential security flaws and recommend remedial actions.

Description:

An advanced ethical hacking laboratory is a state-of-the-art facility equipped with cutting-edge technology and tools specifically designed for conducting advanced cyber security assessments and penetration testing. It is a controlled environment where ethical hackers can simulate real-world attack scenarios, identify vulnerabilities, and recommend security measures to protect computer systems, networks, and applications.

Current Equipment:

The laboratory is well equipped with latest systems (Intel(R) Core(TM) i7-10700 CPU @ 2.90GHz,8GB, Ram,1 TB Hard Disk), which areconfigured in **DUAL BOOT** mode i.e., Students can boot from Windows or Linux as per their lab requirement. This is very useful for students because they are familiar with different Operating Systemsso that they can execute their programs in different programming environments.

The lab is having one white board, projector, instructors table and Chairs, 6 fans, 6 lights,6 windows for good Air circulation and good lighting facility. There are 36 systems available for doing experiments and one system is allotted for one student.

Lab investment: RS.21,39,960/-

Utilization:

This lab is utilized for conducting the following course(s):
22PC1CY102- Advanced Ethical Hacking

Location and Hours:

The Advanced Ethical Hacking Laboratory is located in room no: P402

Open Door Access: 9:00 AM - 6.30 PM
Scheduled classes take priority.

Contact:
NAME: R.Kranthi Kumar
DESIGNATION: Assistant Professor
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2ND PERSON DETAILS
NAME: Dr.P. Subhash
DESIGNATION:Associate Professor
EMAIL ID:subhash_p@vnrvjiet.in

Python Programming Laboratory

Background:

Python Programming Lab (PPL) is a general purpose, high-level programming language; other high- level languages you might have heard of C++, PHP, and Java. Virtually all modern programming languages make us of an Integrated Development Environment (IDE), which allows the creation, editing, testing, andsaving of programs and modules. Many modern languages use both processes. They are first compiled intoa lower-level language, called byte code, and then interpreted by a program called a virtual machine. Python uses both processes, but because of the way programmers interact with it.

Description:

The laboratory provides software facilities Practical aspects are the key to understanding and conceptual visualization Of theoretical aspects covered in the books. Also, this course is designed to review the concepts of Data Structure using C, studied in previous semester and implement the various algorithms related to different data structures

Current Equipment:

The lab is equipped with a high-end computing systems installed with IDLE latest version. The lab is having one white board, Projector, teacher table and Chairs, , 8 fans, 4 lights, 8 windows for good

Air circulation and good lighting facility. There are 36 computers are available for executing programs. and each student is allotted a computer system.

Lab investment: RS.**16,96,742 /-**

Utilization:

 This lab is utilized for conducting the following course(s):
19PC2IT02-Python Programming Laboratory

Location and Hours:

The PPL laboratory is located in room no: D-416
Open Door Access: 9:00 AM - 6.30 PM
Scheduled classes take priority

Contact:
NAME: B. SANGAMESHWAR
DESIGNATION: Assistant Professor
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