SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)

Department of CSE

Laboratory Facilities

S.No	Name of the Laboratory	No. of Computers	Name of the Important Equipments
1	ADVANCED DATA STRUCTURES LAB	60	Lenovo-Intel-i3 Processor, 4GB RAM, 1TB HDDUPS Backup: 20(2*10) KVA (Compact)
2	BIG DATA AND BUSINESS ANALYTICS LABORATORY	60	Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD, Microsoft Windows 7 Academic Get Genuine Legalization License, Virtual Machine and Hadoop cluster and ubunto 14.04
3	COMPUTATIONAL INTELLIGENCE LAB	60	Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD. Basic tools for basic programming logic and basic programming languages and quires.
4	COMPUTER PROGRAMMING LAB	60	Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD. Microsoft Windows 7 Academic Get Genuine Legalization License, Basic software about windows 7, windows 10, free browser and M.S.Office tools.
5	DATABASE MANAGEMENT SYSTEMS LABORATORY	60	Dual core2, 2.7 GHZ, 500 GB HDD, 4GB DDR2, Lenovo and Acer(keyboard and Mouse), Acer 18" LCD/TFT Microsoft Windows 7 Academic Get Genuine Legalization License, PL SQL and ubunto 14.4.
6	MOBILE APPLICATION DEVELOPMENT LAB	60	Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD, Microsoft Windows 7 Academic Get Genuine Legalization License, Virtual Machine and Hadoop cluster and ubunto 14.04

7	NETWORKS LAB	60	Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD, Microsoft Windows 7 Academic Get Genuine Legalization License, Virtual Machine and Hadoop cluster and ubunto 14.04
8	OPERATING SYSTEMS LAB	60	Acer Intel Core i3, 4th Generation / 4 GB RAM / 500 GB SATA HDD / Keyboard/ Mouse / 18.5" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License and freeware Turbo C Editor
9	SKILL DEVELOPMENT LAB	37	Acer Laptop i5 Processor 3.0GHz / 16GB RAM / 1TB HDD Microsoft Windows 7 Academic Get Genuine Legalization License software
10	SYSTEM SOFTWARE LAB	60	HCL Intel Quad Core 2.0GHz / 2 GB RAM / 500GB SATA HDD / Keyboard/ Mouse / 18.5" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License and freeware JDK1.3
11	WEB TECHNOLOGIES LAB	60	Acer Intel Core 2.0, Dual Core – 4160@3.60 GHz / 1 GB RAM / 160GB SATA HDD / Keyboard/ Mouse / 15.1" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License and latest version of browser
12	PYTHON PROGRAMMING LABORATORY	60	Dell Vostro 3902 Intel core i3 – 4160@3.60 GHz / 4 GB DDR3 RAM / 500GB SATA HDD / Keyboard/ Mouse / 18.5" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License, PUTTY SSH Telnet client for Linux, Python / iPython Notebook
13	CSE PROJECT LAB	60	Intel Quad Core 2.0GHz, 500GB HDD, 4 GB RAM, LCD, Acer Keyboard, Microsoft Windows 7 Academic Get Genuine Legalization License, and basic software like M.S Office and browser.
14	MTECH CSE RESEARCH LAB	60	Intel Quad Core 2.0GHz, 160GB HDD, 1 GB RAM, LCD, Acer Keyboard, Microsoft Windows 7 Academic Get Genuine Legalization License, and updated software.

ADVANCED DATA STRUCTURES LABORATORY

The main purpose is to study fundamental data structures, and their design, implementation, efficiency and understand how the choice of data structures can lead to efficient implementations of algorithms in solving problems. Through this lab student will extend data structure programming skills in data structure implementations.

Facilities:

60 number of desktop computer systems: Dual core2, 2.7 GHZ, 500 GB HDD, 4GB DDR2, Lenova and Acer(keyboard and Mouse), Acer 18" LCD/TFT. Microsoft Windows 7 Academic Get Genuine Legalization License, Turbo C.

BIG DATA AND BUSINESS ANALYTICS LABORATORY

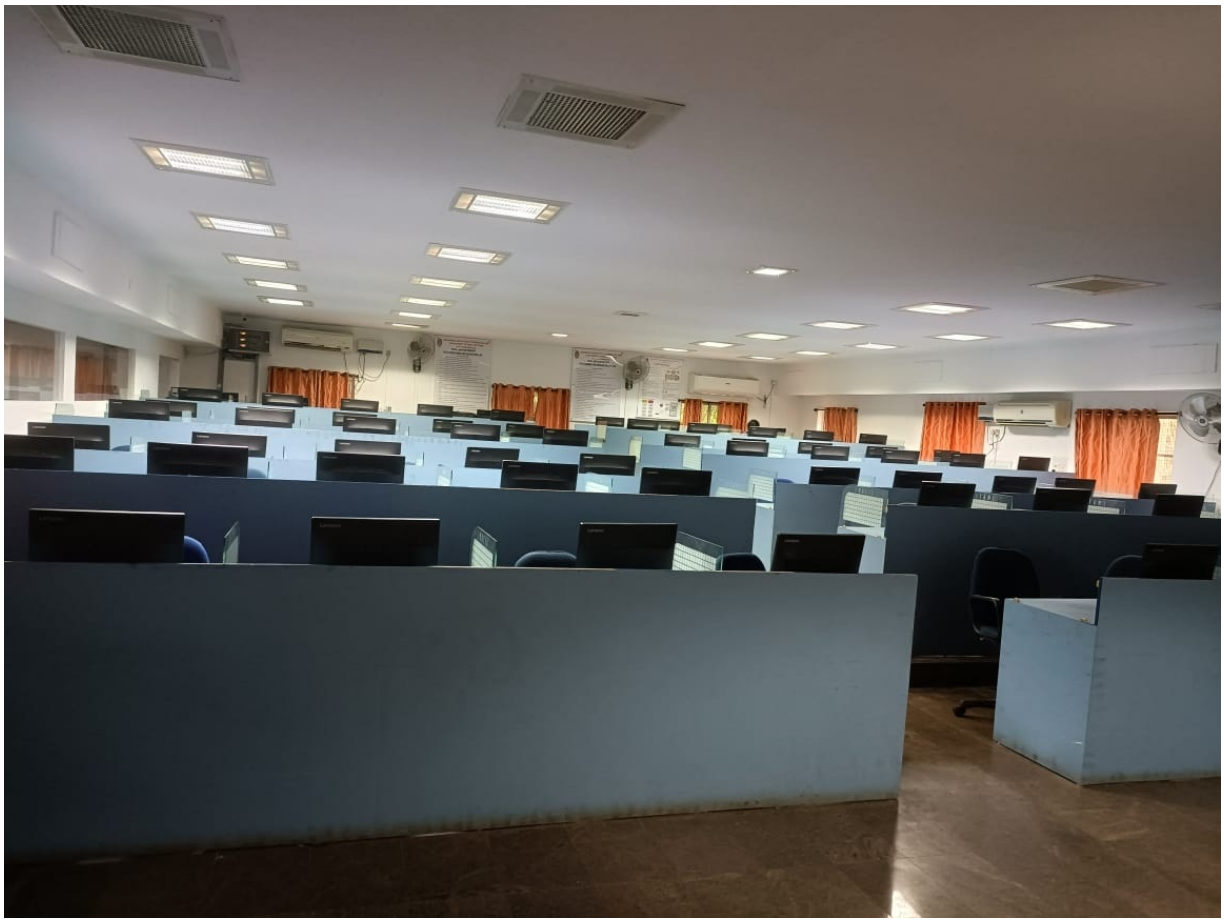
The purpose of the laboratory is to provide the knowledge on working in virtual environment. Through this lab student will get the knowledge on creation and working in distribute environment (virtual) in VMware and Hadoop. It includes the demonstrations on working with Hadoop distributed file system (HDFS), Map Reduce programming, Pig Latin and Hive.

Facilities: 60 number of desktop computer systems: Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD, Microsoft Windows 7 Academic Get Genuine Legalization License, Virtual Machine and Hadoop cluster and ubunto 14.04

COMPUTATIONAL INTELLIGENCE LAB

The purpose of the laboratory is to provide the knowledge on working in Artificial Intelligence virtual environment. Through this lab student will get the knowledge on creation and working in distribute environment (virtual) in VMware and Hardtop. It includes the demonstrations on working with Hardtop distributed file system (HDFS), Map Reduce programming, Pig Latin and Hive.

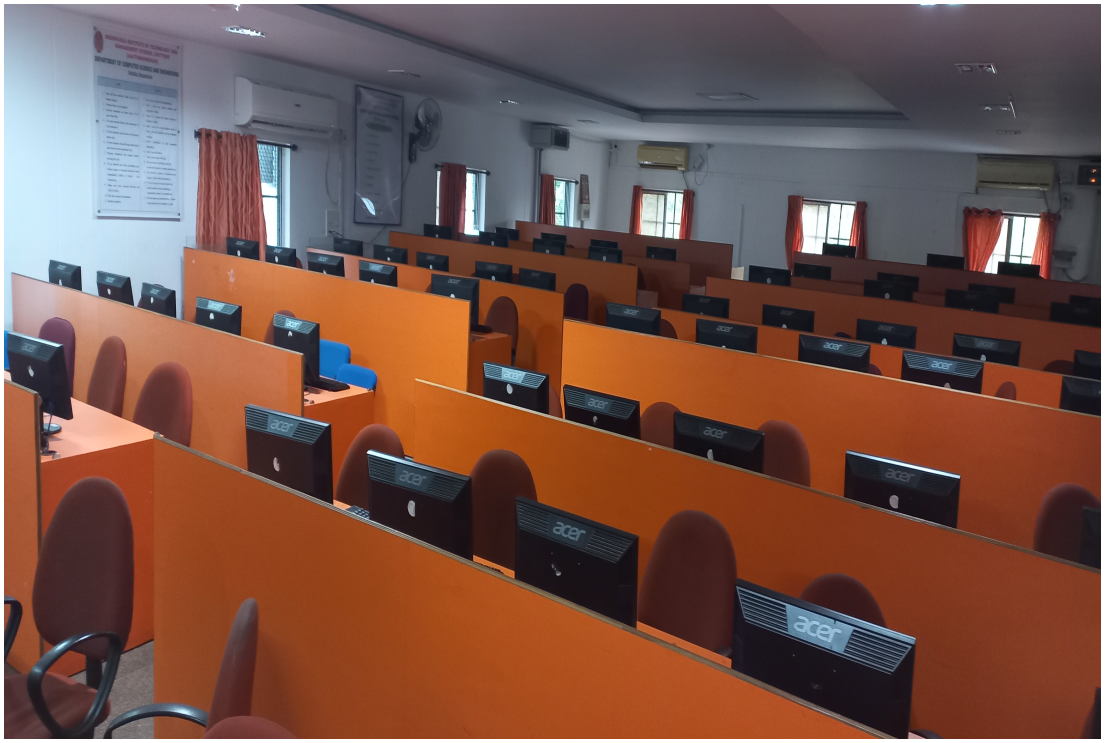
Facilities: 60 number of desktop computer systems: Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD. Basic tools for basic programming logic and basic programming languages and quires.



COMPUTER PROGRAMMING LAB

The purpose of the laboratory is to provide the knowledge on working in Artificial Intelligence virtual environment. Through this lab student will get the basic knowledge computer on creation and working in basic packages of M.S office Documents and distribute environment. It includes the demonstrations on working with M.S.Office basic file works system.

Facilities: 60 number of desktop computer systems: Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD. Microsoft Windows 7 Academic Get Genuine Legalization License, Basic software about windows 7, windows 10, free browser and M.S.Office tools.



DATABASE MANAGEMENT SYSTEMS LABORATORY

The requirement of modern days is to have an automated system that manages, modifies and updates data accurately. This is achieved by a Database Management System (DBMS) in robust, correct and non-redundant way. Through DBMS laboratory, students will get knowledge about the database environment and a way to manage data. Students are made familiar with Oracle Software. Students will also be trained to do certifications in Oracle and advanced databases. In drawing the ER, EER, and UML Diagrams.

Facilities: 60 number of desktop computer systems: Dual core2, 2.7 GHZ, 500 GB HDD, 4GB DDR2, Lenovo and Acer(keyboard and Mouse), Acer 18" LCD/TFT Microsoft Windows 7 Academic Get Genuine Legalization License, PL SQL and ubunto 14.4.

MOBILE APPLICATION DEVELOPMENT LAB

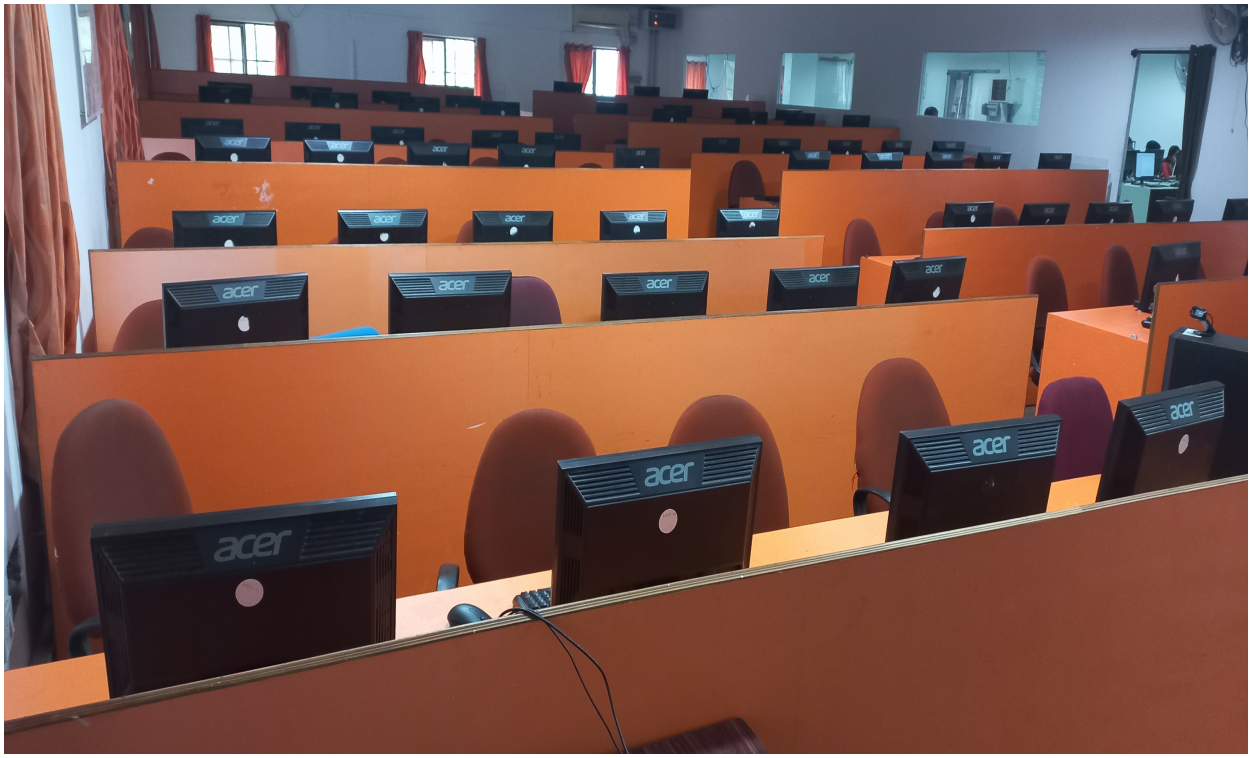
The purpose of this lab is to develop the mobile applications development through architecture. The objective of the mobile application development lab is to design mobile application pages, know the components and structure of mobile application development frameworks for Android and windows OS based mobiles. Understand how to work with various mobile application development frameworks. Learn the basic and important design concepts and issues of development of mobile applications. Understand the capabilities and limitations of mobile devices.

Facilities: 60 number of desktop computer systems: Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD, Microsoft Windows 7 Academic Get Genuine Legalization License, Virtual Machine and Hadoop cluster and ubunto 14.04

NETWORKS LAB

The purpose of this lab is to understand various network simulator tools and functionalities. The objective of the Networks lab is To learn how to create new agent for Communication and how to create new routing protocols for different networks. Through this lab the students can analysis the different routing protocols using different tools

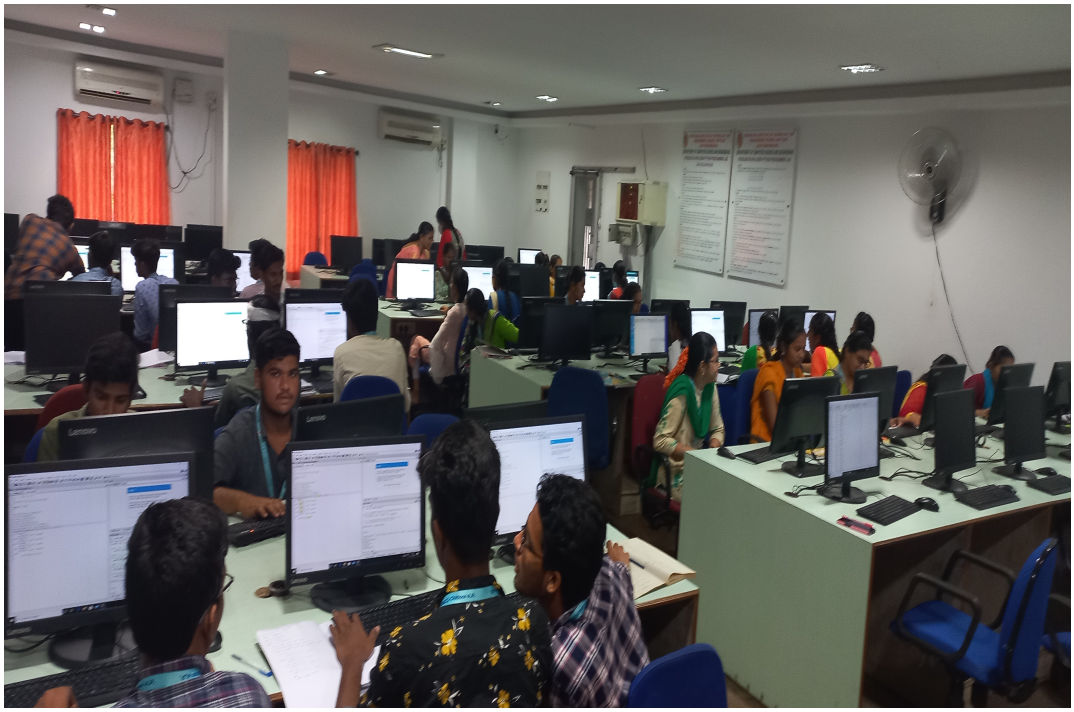
Facilities: 60 number of desktop computer systems: Dell Desktop, Intel Core-i5-5400 Processor (QC/6MB/4T/3.4GHz/65W), 8GB DDR4, 1TB-7200rpm SATA HDD, Microsoft Windows 7 Academic Get Genuine Legalization License, Virtual Machine and Hadoop cluster and ubunto 14.04



OPERATING SYSTEMS LAB

The purpose of this lab is to To understand main components of OS, System structures and the operations performed by OS as a resource manager. The objective of the Operating System lab is to Study process concurrency and synchronization. Through this lab the students can gain knowledge about concepts of input/ output systems and storage management and To manage different file systems, protection and security to the systems

Facilities: 60 number of desktop computer systems: Acer Intel Core i3, 4th Generation / 4 GB RAM / 500 GB SATA HDD / Keyboard/ Mouse / 18.5" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License and freeware Turbo C Editor



SKILL DEVELOPMENT LAB

The aim of the project skill lab is to deepen comprehension of principles by applying them to a new problem which may be the device / system / component / working mode to be created / fabricated may be decided in consultation with the supervisor and if possible with an industry.

Facilities: 37 number of Laptop computer systems: Acer Laptop i5 Processor 3.0GHz / 16GB RAM / 1TB HDD Microsoft Windows 7 Academic Get Genuine Legalization License software

SYSTEM SOFTWARE LAB

The purpose of this lab is to learn and implement the fundamental concepts of Software Engineering. The objective of the System Software lab is to practice the various design diagrams through the appropriate tool and learn to implement various software testing strategies. Through this lab the students can achieve an ability to develop a mini-project by applying the UML Concepts.

Facilities: 60 number of desktop computer systems: HCL Intel Quad Core 2.0GHz / 2 GB RAM / 500GB SATA HDD / Keyboard/ Mouse / 18.5" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License and freeware JDK1.3

WEB TECHNOLOGIES LAB

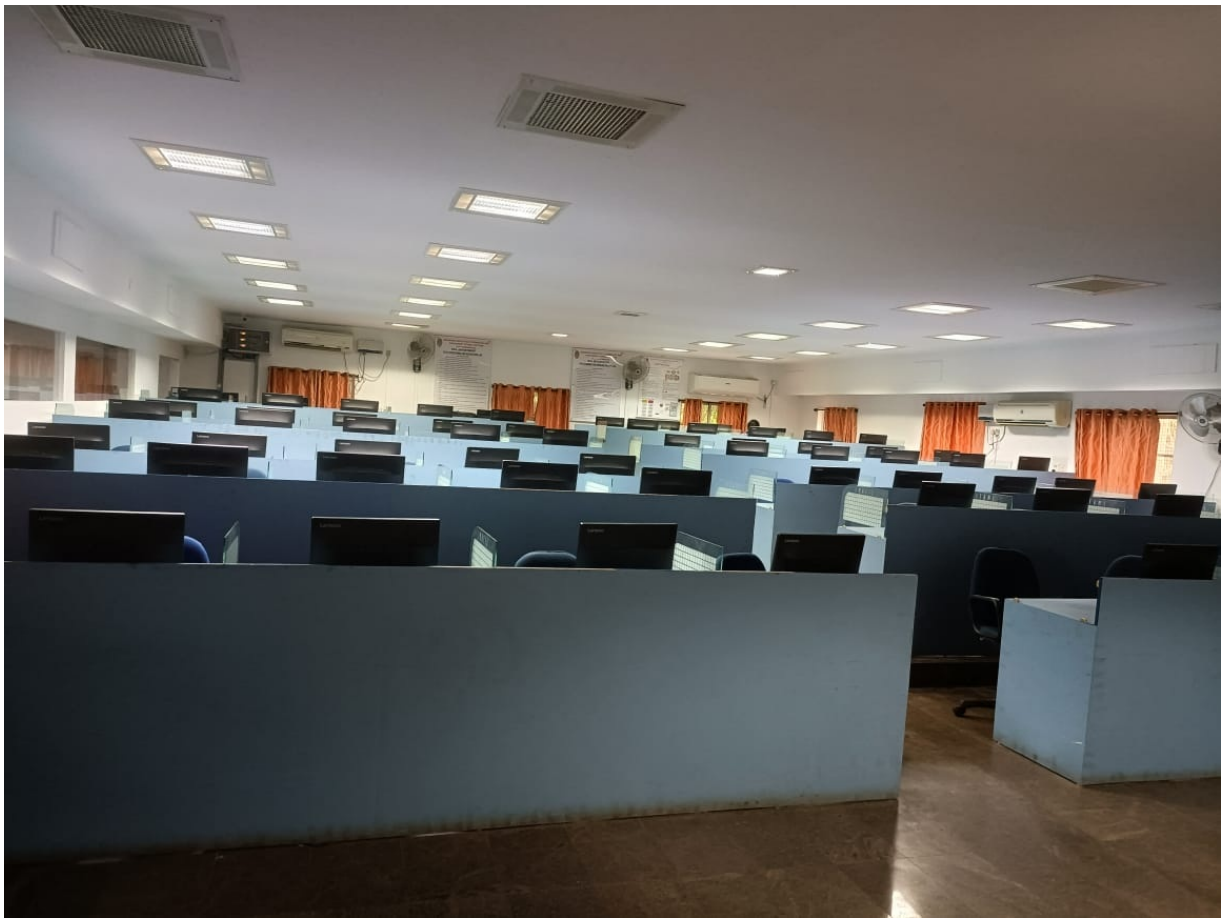
The purpose of this lab is to develop the web applications through MVC architecture. The objective of the web technologies lab is to design web pages, client validations, server side scripting, and data base connectivity. Through this lab the students can achieve an ability to design, implement and deploy static and dynamic web applications.

Facilities: 60 number of desktop computer systems: Acer Intel Core 2.0, Dual Core – 4160@3.60 GHz / 1 GB RAM / 160GB SATA HDD / Keyboard/ Mouse / 15.1" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License and latest version of browser

Python Programming Laboratory

Python Programming laboratory is designed to familiarize students with the basic components of programming, so as to be able to initiate the students into the discipline of Programming Languages. Through this lab student get the ability to design, develop, test and document structured programs in Python language. The expectation is that students will become self-sufficient in learning any programming language on their own thereafter.

Facilities: 60 number of desktop computer systems: Dell Vostro 3902 Intel core i3 – 4160@3.60 GHz / 4 GB DDR3 RAM / 500GB SATA HDD / Keyboard/ Mouse / 18.5" Monitor, Microsoft Windows 7 Academic Get Genuine Legalization License, PUTTY SSH Telnet client for Linux, Python / iPython Notebook



CSE PROJECT LAB

The aim of the project work is to deepen comprehension of principles by applying them to a new problem which may be the design / fabrication / analysis for a specific application, a research project with a focus on an application needed by the industry / society, a computer project, or a design and analysis project. A project topic must be selected by the students in consultation with their guides.

To train the students in preparing project reports and to face reviews and viva voce examination. The progress of the project is evaluated based on a minimum of three reviews. The review committee may be constituted by the Head of the Department. A project report is required at the end of the semester. The project work is evaluated jointly by external and internal examiners constituted by the Head of the Department based on oral presentation and the project report.

Discovering potential research areas in the field of Computer science and Engineering. Comparing and contrast the several existing solutions for the problem identified. Formulating and propose a plan for creating a solution for the research plan identified. Conducting the experiments as a team and interpret the results. Reporting and presenting the findings of the work conducted.

Facilities: 60 number of desktop computer systems Intel Quad Core 2.0GHz, 500GB HDD, 4 GB RAM, LCD, Acer Keyboard, Microsoft Windows 7 Academic Get Genuine Legalization License, and basic software like M.S Office and browser.

MTECH CSE RESEARCH LAB

The aim of the Research work is to deepen comprehension of principles by applying them to a new problem which may be the design / fabrication / analysis for a specific application, a research project with a focus on an application needed by the industry / society, a computer project, or a design and analysis project. A research topic must be selected by the students in consultation with their guides.

Facilities: 60 number of desktop computer systems Intel Quad Core 2.0GHz, 160GB HDD, 1 GB RAM, LCD, Acer Keyboard, Microsoft Windows 7 Academic Get Genuine Legalization License, and updated software.