

Department of Computer Science and Engineering Education: Major Facilities

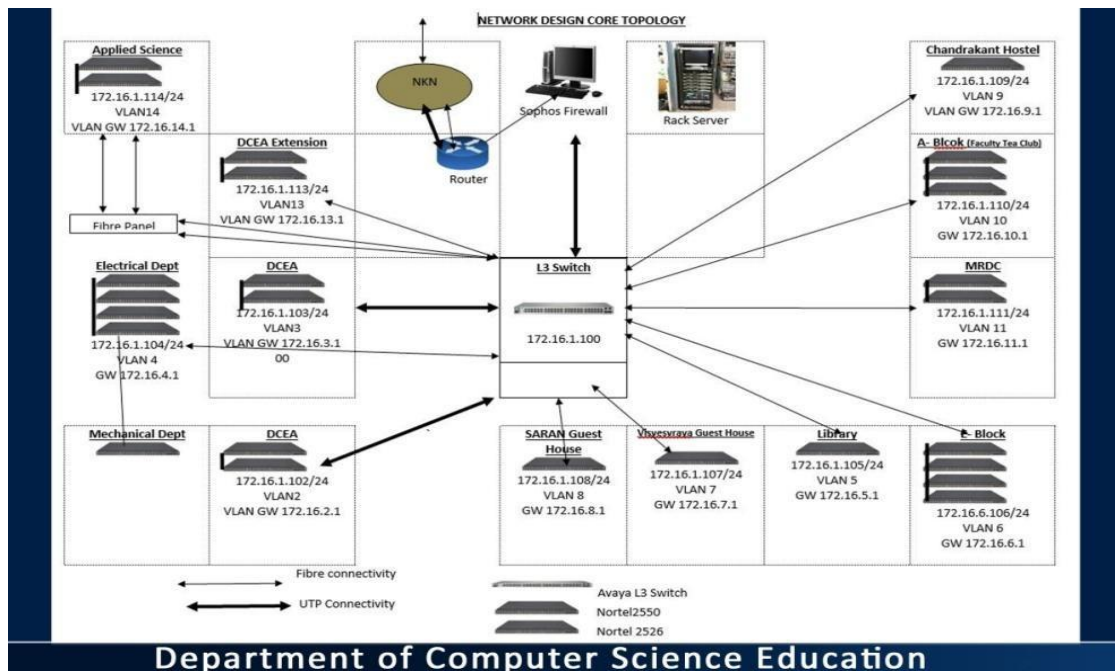
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MAJOR FACILITIES

- The existing physical and IT infrastructure of the department is adequate to serve the training functions and to some extent a regular programme of a small batch size. However, to start proposed UG, PG and Ph.D. programmes separate setup is suggested in this document elsewhere. The department has following well equipped laboratories with all necessary software:
- Computer Centre is equipped with 2 no. RS3 rack servers and 2 no. RS2 rack servers. It is connected on Fiber optic cable backbone-based network, and is serving various Intranet based & web-based applications and programmes. NPTEL Instructional Video programmes are also provided. The network is spread out campus-wide.
- The Department has more than 100 latest configuration computer systems connected on LAN, and having access to Laser & inkjet printers, and scanners.
- 24 hrs. Internet service with 100 Mbps speed through National Knowledge Network (NKN) project of Government of India, is provided.
- State of art Classrooms equipped with computer systems which are connected to projectors, interactive white board, and interactive panels.
- Further, the department is looking after the maintenance and administration of computer network, that is spanning the entire campus including academic buildings, guest houses, student hostels and residences. This gigabit network infrastructure comprises of layer -3 and layer-2 high performance switches. This network is based on fiber optics backbone which is currently supporting about 600 nodes and has a capacity to support about 1200 nodes. All the computer systems can be used for data exchange, hardware resource sharing and for internet connectivity. Journals subscribed through INDEST consortium are available throughout the campus-wide LAN. It also serves NPTEL video and web- based lessons on the network. The internet connectivity is available on 24X7 basis. Currently Internet facility is provided with 1000 Mbps speed through National Knowledge Network (NKN) project of Government of India. The Institute's network management system and data center are in computer center. These are kept alive round the clock.

NETWORKING INFRASTRUCTURE AVAILABLE



GLIMPSES OF ACADEMIC INFRASTRUCTURE/ ACTIVITIES IN THE DEPARTMENT





GLIMPSES OF EXTRA-CURRICULAR ACTIVITIES BY THE DEPARTMENT



LABORATORIES AND ICT INFRASTRUCTURE

The Department of Computer Science and Engineering Education (DCSEE) have the following laboratories.

1. PC Lab

This laboratory is equipped with computer systems connected to projectors. Totally, 11 DELL workstations are available in this lab for conducting the lab experiments of M.Tech student and training for the short-term training programmes. The specifications of the systems are listed below: Dell computer systems are installed with 64-bit windows 7 operating system with Intel(R) Xeon(R) CPU @3.20 GHz, 4 GB RAM and 1TB HDD. The window 7 is used in all systems as an Operation System.

2. Web Engineering Lab

This laboratory is equipped with interactive white board and interactive panels. Totally, 32 HP workstations are available in this lab for conducting the lab experiments of MTech students and training for the short-term training programmes. The specifications of the systems are listed below: HP computer systems are installed with 64-bit windows 7 operating system with Intel(R) Xeon(R) CPU @3.00 GHz, 4GB RAM and 250GB and 1TB HDD. The window 7 is used in all systems as an Operation System.

3. Image Processing Lab

This laboratory is equipped with interactive white board and interactive panels. Totally, 33 HP workstations are available in this lab for conducting the lab experiments of MTech students and training for the short-term training programmes. The specifications of the systems are listed below: HP computer systems are installed with 64-bit windows 7 operating system with Intel(R) Xeon(R) CPU @3.00 GHz, 4GB RAM and 250GB and 1TB HDD. The window 7 is used in all systems as an Operation System.

4. Research & Development Lab

This laboratory is equipped with computer systems connected to projectors. Totally, 12 DELL workstations are available in this lab for conducting the lab experiments of MTech students and training for the short-term training programmes. The specifications of the systems are listed below: Dell computer systems are installed with 64-bit windows 7 operating system with Intel(R) Xeon(R) CPU @3.20 GHz, 4 GB RAM and 1TB HDD. The window 7 is used in all systems as an Operation System.

Kailash Satyarthi Centre for Innovation in AI & ML

This center has three different laboratories such as Research Lab for AI & ML, AI & ML Lab for Skill based Training and Multidisciplinary Lab. The objective of this center is to promote the innovative research on various emerging areas and multidisciplinary research using AI & ML. This center is also aimed to develop the products as prediction models and tools by using AI & ML for the public and academicians. This center is planned to provide skill based training to the unemployed graduates for enriching the employability in the nation.

5. Research Lab for AI & ML

This laboratory is equipped with projectors and interactive panels. This lab contains 30 Intel Core i9 workstations for carrying out the various research activities using AI & ML. The specifications of the workstations are below: Intel core i9-14900 processor, Suitable Chipset for processor, 64GB DDR5 memory, 1 TB hard disk drive, NVIDIA RTX A4000 16 GB GPU card and Windows 11 professional for workstation.

This lab is also having a high-performance GPU workstation to process the big data and carryout the complex research works. The specification of the high-performance GPU workstation is given below: Intel Xeon W7-3565X vPro Enterprise processor, Intel W790 chipset for processor, 256 GB DDR5 4800 RAM, drive controllers, 1 TB hard disk drive, NVIDIA RTX 6000 Ada 48 GB 4DP Graphics card and Windows 11 professional for workstation.

6. AI & ML lab for Skill based Training

This laboratory is equipped with projectors and interactive panels. This lab contains 30 Intel Core i9 workstations for carrying out the various research activities using AI & ML. The specifications of the workstations are below: Intel core i9-14900 processor, Suitable Chipset for processor, 64GB DDR5 memory, 1 TB hard disk drive, NVIDIA RTX A4000 16 GB GPU card and Windows 11 professional for workstation.

7. Multidisciplinary Lab

This laboratory is equipped with projectors and interactive panels. This lab contains 20 Intel Core i9 workstations for carrying out the multidisciplinary research works using AI & ML. The specifications of the workstations are below: Intel core i9-14900 processor, Suitable Chipset for processor, 64GB DDR5 memory, 1 TB hard disk drive, NVIDIA RTX A4000 16 GB GPU card and Windows 11 professional for workstation.

This lab is also having a high-performance GPU workstation to process the big data and carryout the complex research works. The specification of the high-performance GPU workstation is given below: Intel Xeon W7-3565X vPro Enterprise processor, Intel W790 chipset for processor, 256 GB DDR5 4800 RAM, drive controllers, 1 TB hard disk drive, NVIDIA RTX 6000 Ada 48 GB 4DP Graphics card and Windows 11 professional for workstation.