Infrastructure/Facilities

Department has sufficient class rooms and most of them are equipped with multimedia projectors. Department also has Virtual class room & Seminar Hall. There are a number of tutorial rooms. There are ten well equipped laboratories.

Department Library:

CSE department library aims to support the students and faculty by providing the most relevant and required books. The library is well stocked with more than 1319 titles and 2096 volumes of books exclusive to CSE department UG and PG courses. In addition the library is stocked with UG and PG student project reports, faculty and student reference. The library has floor area 42 Sqmts with seating capacity of 15 persons.

 Department Library CS106 /	 Student discussion room CS106

Laboratories with UPS support:

 UG Laboratory 7 – Programming in C laboratory	 UG Laboratory 11 - FCSD laboratory

<table>
<tr>
<td>  U
G Laboratory 8 - Data structure Laboratory</td>
<td> 
UG – Laboratory 2 – Parallel Architecture and Distributed Programing Laboratory</td>
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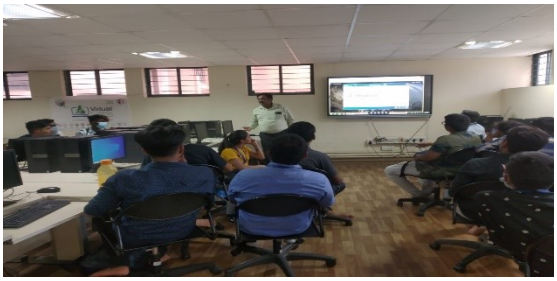
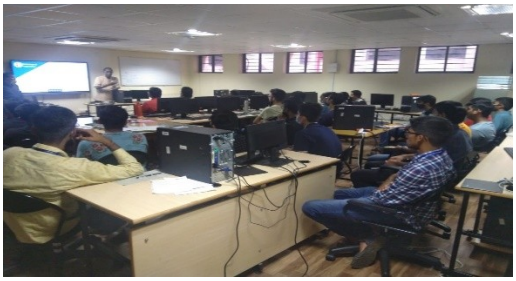
<tr>
<td> 
UG laboratory 4 – Computer Graphics & Virtual Reality Laboratory</td>
<td> 
UG laboratory 5 – Microprocessor Control & Embedded System Laboratory</td>
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<td> 
PG Class room CS014</td>
<td> 
UG Class room 210</td>
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</table>

Class rooms and Tutorial rooms details:

SNo.	Venue Name	Room No	Size in Sqmt	Utilization : For Class room / Tutorial room
Ground Floor				
1	PG CSE Class Room	CS013	45	Class Room
2	PG CNE Class Room	CS014	45	Class Room
First Floor				
3	UG Tutorial	CS101	59	Tutorial

	Room			Room
4	UG Tutorial Room	CS102	60	Tutorial Room
5	UG Class Room	CS112	91	Class Room
6	UG Class Room	CS113	91	Class Room
7	UG Class Room	CS114	91	Class Room
Second Floor				
8	UG Tutorial Room	CS201	63	Tutorial Room
9	UG Tutorial Room	CS202	63	Tutorial Room
10	UG Tutorial Room	CS203	63	Tutorial Room
11	UG Class Room	CS210	91	Class Room
12	UG Class Room	CS211	91	Class Room
13	UG Class Room	CS212	91	Class Room
Third Floor				
14	UG Class Room	CS302	91	Class Room

Department of Computer Science and Engineering,

Laboratory details at CSE

SNo.	Floor wise	Area in Sqmt	Laboratory Available
1	Ground Floor (old building)	72	Laboratory – 01
2		70	Laboratory – 02
3		78	Laboratory – 03
4		70	Laboratory – 04
5		73	Laboratory – 05
6	First Floor (old building)	72	Laboratory – 06
7	Second Floor (old building)	77	Laboratory – 07
8		77	Laboratory – 08

9		74	Laboratory – 09
10		77	Laboratory – 10
11		77	Laboratory – 11
12	Third Floor (new building)	91	Laboratory – 12
13		60	Laboratory - 13

Computing Infrastructure at CSE

Sl No.	Description	Available
1	Total number of Servers	06 Numbers
2	Total number of Workstations	09 Numbers
3	Total number of Mobile workstations	02 Numbers
4	Total number of Desktop computers	360 Numbers
5	Total number of laptops	05 Numbers
6	Manageable switches	30 Numbers
7	Web manageable switches	05 Numbers
8	Total number of Access point (Wifi)	21 Numbers
9	Total number of Air conditioners (centralized)	03 Numbers
10	Total number of Air conditioners	17 Numbers
11	Total number of Smart boards (interactive boards)	08 Numbers
12	Total number of Projectors	19 Numbers
13	Total number of Fire extinguishers	23 Numbers
14	Total number of UPS capacity	140 KVA
15	Internet speed (Railtail-500Mbps, Seans media-500Mbps)	1Gbps

Laboratory – 01

Sl. No.	Description	Software used	Utilization
1	ACER Veriton, Intel core™ I5 CPU 661 @3.33 GHZ(4 CPU), 4GB RAM, 1*500 GB SATA HDD7200 RPM, V173	Ubuntu 18.04,	PADP lab

	LCD MONITOR, 17” TFT Monitor, Keyboard, Optical Mouse – 18 Nos.		
2	Acer Veriton M200 H81, Intel(R) Core(TM) i5-4460 CPU @3.20GHz (4 CPUs), 8 GB DDR3 RAM, 1 TB SATA HDD, Intel(R) HD Graphics 4600, 19” TFT Monitor, Keyboard, Optical Mouse - 1 Nos.	Ubuntu 18.04,Windows 8.1 single language	PADP lab
3	**HP Z420,** Intel(R) Xeon(R) CPU E5-2650 V2 @2.6GHz X 16, Intel Corporation C600x79, Series Chip Set CPU Controller, 8GB * 4 DDR3 RAM = 32 GB, 1 TB* 2 SATA Hard Disk Drive =2TB, DVD RW Drive, **NVIDIA TESLA K20 GPGPU,** Display Memory : 5 GB, 23-in LED Backlit LCD, Keyboard and Optical Mouse	CentOS 7	• Used for hosting International conference website(CSITSS) • Graphics Application using C#.net for Industrial Requirement • Capture and Relay Tool NVIDIA- GPU Research Centre • Parallelizing CPU Centric applications/ algorithms on GPUs to optimize the performance using CUDA • Optimization of Cryptographic algorithm using High Performance • Computing Traffic Generator using Intel Data Plane Development Kit
4	**NVIDIA Jetson Nano Kit** - 5 Nos.	Ubuntu 20.04	Minor and Major Project for smaller data sets rendering purpose (real time camera images)
5	**GPU Server Model (CONNOI)** GPU Server Model(CONNOI): 2 x Intel Xeon E5-2620v3, (15MB Cache, 2.4 Ghz, 7.2GT/s Intel QPI), 6 cores, 12	Ubuntu 20.04	• Graphics Application using C#.net for Industrial Requirement • Capture and Relay Tool

	Threads, 32GB RAM ECC Reg. 8GB x 4 RAM modules. Total 16 DIMM slots, Max 768.0 GB RAM, 4 x PCI Express x 16 slot Gen 3.0, 1x PCI express x 8 Slot Gen 3.0, 1 x PCI Express x 4 Slot Gen 2.0, 1 x 2.0 TB SATA HDD, DVD-RW, 10 x Integrated SATA II Ports supporting SATA 6G, 18.5" LED Monitor, 1x NVidia GeForce 210 with 1.0 GB RAM Graphics card, Integrated 2 x Intel Gigabit Ethernet Controller. 104 Keyboard, Optical Mouse, Tower Chassis with 1000 watts single power supply, support Ubuntu /Windows server -Lab3		NVIDIA- GPU Research Centre • Parallelizing CPU Centric applications/ algorithms on GPUs to optimize the performance using CUDA • Optimization of Cryptographic algorithm using High Performance. • It is assigned to students carry out minor projects to processes high quality satellite images and deep learning normal networks
6	**HPE ProLiant ML150 Generation 9 Tower Server** :Dual Intel® Xeon®, E5-2620v3 (2.4GHz/6-core/15MB/85W) Processor, 128GB RDIMM @2133MHz Main Memory; 3 x HP 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline, 1 year Warranty Hard Drive; HP H240 12Gb 2-ports Internal Smart Host Bus Adapter; SATA 9.5mm, DVD RW Optical Drive;HPE iLO (Firmware HPE iLO4 2.3), 2GB NAND (License to be procured separately for using this)	CentOS 7	• HPCC systems cluster running with 1 master node with 5 clients • Virtualization done, OS:Cent OS 7 • It is allotted for HPCC systems which is used data analytics purpose for BIG Data
7	**JW Fishers MC-1 Mini Underwater Video Camera** **Rugged Design:** The Mini Camera housing is ruggedly constructed of corrosion proof PVC making it an excellent choice for work in depths of up to 500 feet. The cable jacket is		• Purchased under NRB funded Project • To build 3D models of an underwater objects using 2D images.

	constructed of highly abrasive resistant urethane. The optional external underwater light is water-cooled allowing many operations between bulb replacement. **Options for the MC-1 include:** internal LED light ring, external 100 or 250 watt light(s), 120 vac operation, cable lengths up to 1,000 feet, color cameras, commercial grade black & white or colour cameras, black & white or color monitors and PAL cameras		
8	HP Z840 Workstation, Intel Xeon E 2.2 GHz, 55MB Cache, Intel V Pro, Intel c612, 1TB DDR4- 2400 ECC Registered SDRAM 512 GB, **NVIDIA Quadro 4GB**	Win 10 Pro., & Ubuntu 20.04	Purchase under KCTU project • Graphics Application using C#.net for Industrial Requirement • Capture and Relay Tool NVIDIA- GPU Research Centre • Parallelizing CPU Centric applications/ algorithms on GPUs to optimize the performance using CUDA • Assigned for Aerospace Engineering (Ansys installed and configured for their major project)
9	Mobile Workstation - Intel Core i7-8750H, 2.20Ghz, 16 GB RAM, 512 GB SSD, **NVIDIA Quadro P1000**, Win 10Pro	Win 10 Pro, Kali Linux	
10	Patient Monitor & Development kit, Contec CMS8000 Patient Monitor, USFDA Approved Cardiac Multipara Monitor, 12.1 inch Multipara Monitor, 5 parameter		• Design and Development of Wearable Real Time ECG monitoring Systems • Android Communication Interface using

			AOA and GUI programming to achieve the operation Interface to medical equipment
11	**HP Z4 G4 workstation,** Intel Core i9 – 10900x CPU 3.7 Ghz, 128 GB RAM, 2 TB HDD SATA, **NVIDIA Quadro P2200 5 GB** 24” LED Monitor, Wireless keyboard and mouse,	Win 10 Pro	Purchased under VGST project • Assigned for Electronics and Communication Engineering Department (Installed Ansys software and configured for their major project)
12	**HP Workstation Z238 MT** E3-1240v3 3.5 8M GT2 4C CPU 64 DDR4, 1TB HDD, **NVIDIA Quadro K620 2 GB,** Win 8.1 Pro, DVD RW, HP 23VX MONITOR	Win 10 Pro	Assigned for HPCC systems • It is allotted for HPCC systems which is used data analytics purpose for BIG Data • User for other research activites
13	**Super Micro GPU Workstation:** Processor-CLX 6226R 2P 16C/32T 2.9G 22M 10.4GT 150W 3647 B1 -2 Nos. Memory-32GB 2933MHz DDR4 RAM – 4 Nos., SSD-1TB, SATA, 2.5", 3D TLC, 1.5DWPD – 1 No., Hard disk- 3.5" 10TB SATA 6Gb/s 7.2K RPM 128M 512E (Tomcat) with raid controller – 3 Nos. **GPU-NVIDIA A100 40GB PCIE (EDUCATION DISCOUNT APPLIED) – 2 Nos.** Power supply- 2200W Redundant Power supplies Titanium Level 96% - 1No., LAN-2x 10GbE LAN and one IPMI Port – 1 No.	Ubuntu 20.04	• Used by CSE and BT • Installed with Ubuntu 20.04 • Docker installed 20.00 • Tensorflow, phyton, keras were installed • 22 -25 users can parallel connect and perform the AI & ML related activates • Assigned for students to carryout minor and major projects

Laboratory – 02

SN o.	Description	Software used	Utilization
1	Acer Veriton M200 H81, Intel(R) Core(TM) i5-4460 CPU @3.20GHz (4 CPUs), 8 GB DDR3 RAM, 1 TB SATA HDD, Intel(R) HD Graphics 4600, 19” TFT Monitor, Keyboard, Optical Mouse – 28 Nos.	Ubuntu 18.04,Windows 8.1 single language	PADP lab, CD Lab, English lab, NPS lab

Laboratory – 03

SN o.	Description	Software used	Utilization
1	Acer Veriton M200 H81, Intel(R) Core(TM) i5-4460 CPU @3.20GHz (4 CPUs), 8 GB DDR3 RAM, 1 TB SATA HDD, Intel(R) HD Graphics 4600, 19” TFT Monitor, Keyboard, Optical Mouse -1 Nos.	Ubuntu 18.04,Windows 8.1 single language	PADP lab, CD Lab, CG lab, English lab, NPS lab
2	ACER Veriton, Intel core™ I5 CPU 661 @3.33 GHZ(4 CPU), 4GB RAM, 1*500 GB SATA HDD7200 RPM, V173 LCD MONITOR, 17” TFT Monitor, Keyboard, Optical Mouse – 2 Nos.	Ubuntu 18.04,Windows 8.1 single language	PADP lab, CD Lab, CG lab, English lab
3	DELL OPTIPLEX 3046: INTEL ® CORE i5- 6500 @ 2.13GHZ, 8 GB DDR4 RAM, 1 TB HDD, 18.5” LED (Compaq/Dell) Monitor, Keyboard, Optical Mouse – 26 Nos.	Ubuntu 18.04,Windows 8.1 single language	PADP lab, CD Lab, CG lab, OOPs lab, English lab
4	ACER Veriton, Intel core™ I5 CPU 661 @3.33 GHZ(4 CPU), 4GB RAM, 1*500 GB SATA HDD7200 RPM, V173 LCD MONITOR, 17” TFT Monitor, Keyboard, Optical Mouse – 2 Nos.	Ubuntu 18.04,Windows 8.1 single language	SAP entry and documentation purpose
5	Acer Veriton M200 H310, Intel(R) Core(TM) i5-8400 CPU @2.80GHz turbo upto 4.0Ghz, 8 GB DDR4 RAM, 1 TB SATA HDD, Intel(R) UHD	Ubuntu 18.04,Windows 8.1 single language	SAP entry and documentation purpose

	Graphics 4600, 19.5” LED Backlit Monitor, Keyboard, Optical Mouse , Windows Single language 64bit, 5 YearsNBD Comprehensive warranty – 1 Nos.		

Laboratory – 04

SNo.	Description	Software used	Utilization
1	DELL OPTIPLEX 3046: INTEL ® CORE i5- 6500 @ 2.13GHZ, 8 GB DDR4 RAM, 1 TB HDD, 18.5” LED (Compaq/Dell) Monitor, Keyboard, Optical Mouse – 26 Nos.	Ubuntu 18.04,Windows 8.1 single language	PADP lab, CD Lab, CG lab, OOPs lab, English lab

Laboratory – 05

SNo.	Description	Software used	Utilization
1	Acer Veriton M200 H310, Intel(R) Core(TM) i5-8400 CPU @2.80GHz turbo upto 4.0Ghz, 8 GB DDR4 RAM, 1 TB SATA HDD, Intel(R) UHD Graphics 4600, 19.5” LED Backlit Monitor, Keyboard, Optical Mouse , Windows Single language 64bit, 5 YearsNBD Comprehensive warranty – 27 Nos.	Ubuntu 18.04, Windows 8.1 single language	Programming in C lab, MCES lab

Laboratory – 06

SNo.	Description	Software used	Utilization
1	Acer Veriton M200 H310, Intel(R) Core(TM) i5-8400 CPU @2.80GHz turbo upto 4.0Ghz, 8 GB DDR4 RAM, 1 TB SATA HDD, Intel(R) UHD Graphics 4600, 19.5” LED Backlit Monitor, Keyboard, Optical Mouse , Windows Single language 64bit, 5 YearsNBD Comprehensive warranty	Ubuntu 18.04, Windows 8.1 single language	Programming in C lab, MCES lab
2	HP Compaq dx7480, intel	Ubuntu	Programming in C

	core 2 duo E7500 processor 2.96Ghz, 3mb l2cache 2 GB DDR2 RAM, 250GB HDD ATA, HP Optical Mouse, Keyboard, 15” wide TFT Color Monitor, DVD combo	18.04, Windows 8.1 single language	lab, MCES lab
3	ACER Veriton, Intel core™ I5 CPU 661 @3.33 GHZ(4 CPU), 4GB RAM, 1*500 GB SATA HDD7200 RPM, V173 LCD MONITOR, 17” TFT Monitor, Keyboard, Optical Mouse	Ubuntu 18.04, Windows 8.1 single language	Programming in C lab, MCES lab
4	ACER Veriton, Intel core™ I5 CPU 661 @3.33 GHZ(4 CPU), 4GB RAM, 1*500 GB SATA HDD7200 RPM, V173 LCD MONITOR, 17” TFT Monitor, Keyboard, Optical Mouse	Ubuntu 18.04, Windows 8.1 single language	Programming in C lab, MCES lab

Laboratory – 07

SNo.	Description	Software used	Utilization
1	HP 280 G3, Intel 7 th generation CoreTM i3 Processor: 8GB DDR4-2400 Memory ,1 TB SATA 7.2K RPM HDD,18.5” LED Backlight Monitor ,HP keyboard & Optical Mouse - 27 Nos.	Ubuntu 18.04,windows 10 professional	Programming in C lab, English lab, DAA lab

Laboratory – 08

SNo.	Description	Software used	Utilization
1	HP 280 G3, Intel 7 th generation CoreTM i3 Processor: 8GB DDR4-2400 Memory ,1 TB SATA 7.2K RPM HDD,18.5” LED Backlight Monitor ,HP keyboard & Optical Mouse - 27 Nos.	Ubuntu 18.04,windows 10 professional	Programming in C lab, English lab, DAA lab

Laboratory – 09

SNo.	Description	Software used	Utilization
1	DELL OPTIPLEX 3046: INTEL	Ubuntu	Programming in C

	® CORE i5- 6500 @ 2.13GHZ, 8 GB DDR4 RAM, 1 TB HDD, 18.5” LED (Compaq/Dell) Monitor, Keyboard, Optical Mouse-19 Nos.	18.04,windo ws 10 professional	lab, English lab, DAA lab and FCSD lab
2	ACER Veriton, Intel core™ I5 CPU 661 @3.33 GHZ(4 CPU), 4GB RAM, 1*500 GB SATA HDD7200 RPM, V173 LCD MONITOR, 17” TFT Monitor, Keyboard, Optical Mouse- 3 Nos.	Ubuntu 18.04,windo ws 10 professional	Programming in C lab, English lab, DAA lab and FCSD lab
3	HP Pro333, Intel Core i5-2400, CPU 3.10 GHz Processor, 8 GB DDR3 Memory RAM, 500 GB SATA HDD, DVD WRITER, Integrated Gigabit Ethernet, ATI Radeon HD 4100 Integrated Graphics, 18.5” Wide LED Monitor, Keyboard , Optical Mouse -6 Nos.	Ubuntu 18.04,windo ws 10 professional	Programming in C lab, English lab, DAA lab and FCSD lab
4	Acer Veriton M200 H310, Intel(R) Core(TM) i5-8400 CPU @2.80GHz turbo upto 4.0Ghz, 8 GB DDR4 RAM, 1 TB SATA HDD, Intel(R) UHD Graphics 4600, 19.5” LED Backlit Monitor, Keyboard, Optical Mouse , Windows SL 64bit, 5 Yrs NBD Comprehensive warranty – 3 Nos.	Ubuntu 18.04,windo ws 10 professional	Programming in C lab, English lab, DAA lab and FCSD lab
5	DELL OPTIPLEX 745: INTEL ® CORE 2 DUO CPU 6400 @ 2.13GHZ, 2 GB DDR2 RAM, 80GB HDD, DVD Combo Drive, Floppy Disk, 19” TFT Monitor, Keyboard, Optical Mouse (Project sponsored) – 4 Nos.	Gift given systems	Programming in C lab, English lab, DAA lab

Laboratory – 10

SN o.	Description	Software used	Utilization
1	Acer Veriton M200 H310, Intel(R) Core(TM) i5-8400 CPU @2.80GHz turbo upto 4.0Ghz, 8 GB DDR4 RAM, 1 TB SATA HDD, Intel(R) UHD	Ubuntu 18.04,windo ws 8.1 single language	CN lab, DBMS lab, NPS lab, English lab and FCSD lab

	Graphics 4600, 19.5” LED Backlit Monitor, Keyboard, Optical Mouse , Windows Single language 64bit, 5 YearsNBD Comprehensive warranty – 25 Nos.		

Laboratory – 11

SN o.	Description	Software used	Utilization
1	DELL OPTIPLEX 3046: INTEL ® CORE i5- 6500 @ 2.13GHZ, 8 GB DDR4 RAM, 1 TB HDD, 18.5” LED (Compaq/Dell) Monitor, Keyboard, Optical Mouse – 24 Nos.	Ubuntu 18.04, Windows 8.1 single language	English lab, CN lab, DBMS lab and FCSD lab
2	Acer Veriton M200 H310, Intel(R) Core(TM) i5-8400 CPU @2.80GHz turbo upto 4.0Ghz, 8 GB DDR4 RAM, 1 TB SATA HDD, Intel(R) UHD Graphics 4600, 19.5” LED Backlit Monitor, Keyboard, Optical Mouse, Windows SL 64bit, 5 Yrs, NBD Comprehensive warranty – 1 Nos.	Ubuntu 18.04, Windows 8.1 single language	English lab, CN lab, DBMS lab and FCSD lab

Laboratory – 12

SN o.	Description	Software used	Utilization
1	DELL OPTIPLEX 3046: INTEL ® CORE i5- 6500 @ 2.13GHZ, 8 GB DDR4 RAM, 1 TB HDD, 18.5” LED (Compaq/Dell) Monitor, Keyboard, Optical Mouse -1 Nos.	Ubuntu 18.04, windows 8.1 single language	BDA lab, AA lab, DS lab, Internship projects, Minor project and Major Projects
2	HP Pro333, Intel Core i5-2400, CPU 3.10 GHz Processor, 8 GB DDR3 Memory RAM, 500 GB SATA HDD, DVD WRITER, Integrated Gigabit Ethernet, ATI Radeon HD 4100 Integrated Graphics, 18.5” Wide LED Monitor, Keyboard , Optical Mouse – 7	Ubuntu 18.04, windows 8.1 single language	BDA lab, AA lab, DS lab, Internship projects, Minor project and Major Projects

	Nos.		
3	HP-ProDesk 400 G6 - IntelCore i7-10700 8c processor,16GB DDR4-2666 MemoryL 512 GB M.2 storageL Integrated Ethernet, Wireless & Bluetooth: Keyboard & Mouse : Windows 10 home Single Language 64 Bit; HP 19.5" Wide Display – 20 Nos.	Ubuntu 18.04, windows 8.1 single language	BDA lab, AA lab, DS lab, Internship projects, Minor project and Major Projects

Laboratory – 13

SNo.	Description	Software used	Utilization
1	HP Pro333, Intel Core i5-2400, CPU 3.10 GHz Processor, 8 GB DDR3 Memory RAM, 500 GB SATA HDD, DVD WRITER, Integrated Gigabit Ethernet, ATI Radeon HD 4100 Integrated Graphics, 18.5” Wide LED Monitor, Keyboard , Optical Mouse – 1 Nos.	Ubuntu 18.04, windows 8.1 single language	ACN lab, INS lab, WCT lab, Internship projects, Minor project and Major Projects
2	ACER VERITON M 200 Desktop with - Core i7-4790 Processor, 8 GB RAM DDR3 (2 x 4GB) H81 M4 Chipset Mother board, 1 TB SATA HDD, 16 x DVD RW (dual layer), 2 GB ATI Radeon Graphics card, 18.5" wide backlit LED, USB Keyboard, Optical Mouse, Windows 8.1 SL. – 20 Nos.	Ubuntu 18.04, windows 8.1 single language	ACN lab, INS lab, WCT lab, Internship projects, Minor project and Major Projects

Facilities provided:

Facilities for Students:

1. IEEE Student Chapter for Technical activities
2. Sponsorship for Projects and Research
3. Well Stocked Departmental Library
4. Internet Facility for Browsing Technical Journals
5. Hard copies of Online Journals
6. Sponsorship from Various Organizations for projects

Facilities for Faculty:

1. Sponsorship to all research activities including foreign travel
2. Medical Insurance
3. Well Stocked Department Library
4. Internet Facility 1Gbps with Wifi connectivity
5. Hard copies of online Journals
6. Study / Sabbatical leave for higher studies / industrial training
7. Maternity leave
8. Bus facility
9. Work load reduction for faculty pursuing PhD