

COMPUTER CENTRE AT A GLANCE



PEC

EXPLORE • INNOVATE • EXCEL

Punjab Engineering College

(Deemed to be University), Chandigarh

(a Deemed University under Section 3 of UGC Act, 1956)

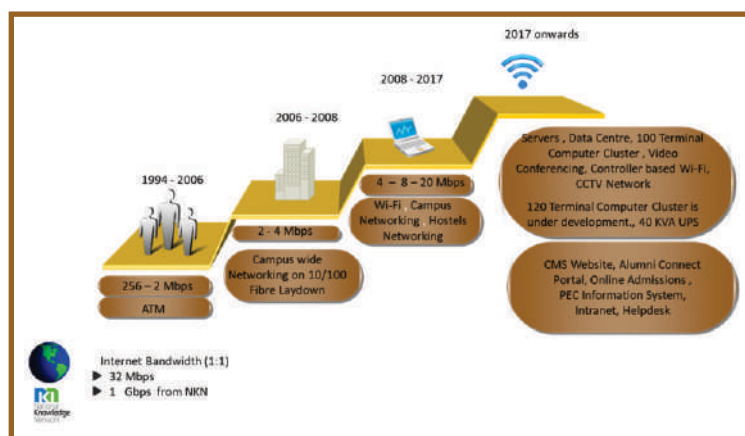
Sector 12, Chandigarh | www.pec.ac.in

ABOUT THE CENTRE

- ▶ Computer Centre is the central place for campus-wide networking and Internet connectivity. Backbone connectivity initiates from this Centre and caters to more than 2000 nodes across the campus. The Centre is equipped with Web Server, Academia Server, E- Mail Server, Security Wall, Bandwidth Management and Data Servers. The Computer centre has network infrastructure consisting of routers, firewall, Unified Threat Management (UTM), manageable layer 2, layer 3 switches. It also houses cluster of Windows and Linux based servers for mailing and web application hosting.
- ▶ A 100 Terminal Cluster Lab is available for students for their project work, programming assignments, M.Tech & Ph.D thesis work and conducting online placement test. Internet access for all students is available with 100 Mbps to 1Gbps speed.

BACKGROUND

- ▶ Established in 1994
- ▶ 1994 – 2005:
 - ▶ Laying of Fiber cable
 - ▶ Backbone ATM.
 - ▶ 10/100 Mbps connectivity.
 - ▶ Internet connectivity 128 kbps – 512 kbps
- ▶ 2006 onwards :
 - ▶ Laying of fiber cable. (Approx 5000 mtrs)
 - ▶ Backbone Gigabit.
 - ▶ 1000 Mbps (1Gbps) connectivity.
 - ▶ Internet Bandwidth 32 Mbps (1:1) and 1 Gbps from NKN.



EVENTS ORGANIZED

Sr.No.	Event	Participation	Date
2016-17			
1.	Three days Workshop on Python Programming Fundamentals	30	14th to 16th March 2016
2.	Two Days Workshop on Data Mining Using STATISTICA	16	27th and 28th June, 2016
3.	Three Days Workshop on Fundamentals of MATLAB	25	13th to 15th July, 2016
2017-18			
1.	Workshop for Faculty Mentors on Induction Programme	87	22nd to 24th September 2017
2018-19			
1.	ANSYS (CFD + FEA) & (EM + HFSS)	55	4th to 7th June 2018
2.	MATLAB	20	18th to 22nd June 2018
3.	Six Weeks Workshop on Web Development	15	19th July 2018

CENTRALIZED SOFTWARES PROCURED

Sr. No.	Name
1.	Microsoft campus agreement was concluded with Microsoft corp. to get latest operating systems and other Microsoft application softwares for use by faculty and staff of the institute
2.	ERDAS (Civil Engineering Department)
3.	ANSYS (Aeronautical Engineering Department)
4.	GIS remote sensing and Photogrammetry package

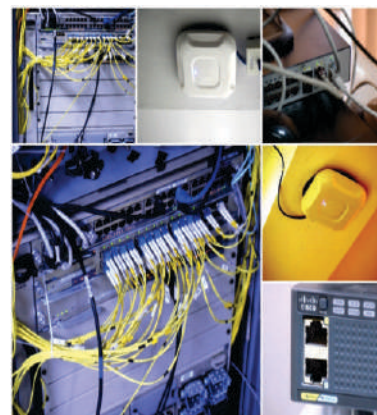
UPGRADATION OF INFRASTRUCTURE

- ▶ Controller Based Wireless Network
- ▶ Existing core/ edge switches has been replaced with newer technology supporting 10G Network Backbone.
- ▶ Data Centre
- ▶ CCTV network

NETWORK

Campus Wi-Fi

- ▶ The campus is now equipped latest Controller Based Wireless Network with more than 200 wireless access points across the academic area for smooth internet access throughout the campus. The wireless nature of campus networks allow users to access network resources from nearly any convenient location within the campus. With the increasing saturation of laptop-style computers, this is particularly relevant.
- ▶ Users connected to a wireless network can maintain a nearly constant affiliation with their desired network as they move from place to place. For an institute, this implies that a student can potentially be more productive as his or her work can be accomplished from any convenient location.



DATA CENTRE

A Data Centre has been established for Central Research Lab under Technical Education Quality Improvement Programme Phase II (TEQIP II) in Computer Centre. The aim of establishing Data Centre

- ▶ Set up virtual lab of software that require substantial amounts of memory and computing power. A virtual lab will give students access to software and computing power from any place with internet access.
- ▶ Virtualization of servers.



CCTV SURVEILLANCE

CCTV network has also been established in the institute this year. All entrances of the institute and other areas where security is needed have been covered under CCTV supervision. Central control room is functional for the cameras where security personnel can keep a close eye on the activities in the institute.



40 KVA UPS

- ▶ A 40 KVA UPS with high availability is now placed in the Centre to cater to power needs of the Computer Centre.



SERVICES

- ▶ Internet
- ▶ Campus Networking
- ▶ Web, Software, Anti-Virus, Email
- ▶ AMC of Computers Peripherals
- ▶ Organize Online Examinations for Companies during Training & Placement Sessions
- ▶ Framing technical specification for Server/Desktop/Laptop, providing technical support, assistance and guidance for purchase of IT Products

OTHER SERVICES

- ▶ Active contribution towards:
- ▶ The Admission Process of the Institute
- ▶ Continuously updating NBA, AICTE, AISHE, NIRF Portals



All India Council for Technical Education
अखिल भारतीय तकनीकी शिक्षा परिषद्



FACILITIES

- ▶ In-house maintenance of computers and peripherals.
- ▶ In-house maintenance of Campus Network

IN-HOUSE DEVELOPMENT

Alumni Connect Portal

An alumni connect Website was developed by the computer centre team to facilitate two-way communication between the institute and its alumni. It was inaugurated by the chief guest for the occasion, Sh. Indresh Kumar, PEC alumnus on August 4, 2015

PEC Information System (PEC-IS)

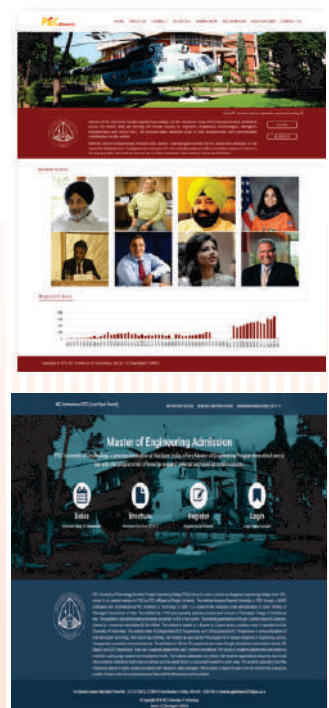
An Information System has been developed by the computer centre team to maintain records of various department related data such as faculty details, Publications, Research, consultancy and Student Information. It also maintains records of annual expenditures by various sections.

Online Admission Portal for PG Admissions

An Online Admission Portal for the institute has been developed by the computer centre team. It allows students to register for admission in various PG Courses and stay updated during the admission process. It has a responsive design so that it can easily be viewed on any device.

Computer Centre Helpdesk

A Helpdesk Portal has been developed to maintain a log of various IT calls attended by the Computer Centre Staff. It helps in generation of reports of technical issues across the institute and various departments.



INTRANET

- ▶ A private network accessible only to an organization's staff has been developed. Information and services from the institute's internal IT systems are available that would not be available to the public from the Internet.
- ▶ Link: <http://intranet.pec.ac.in>

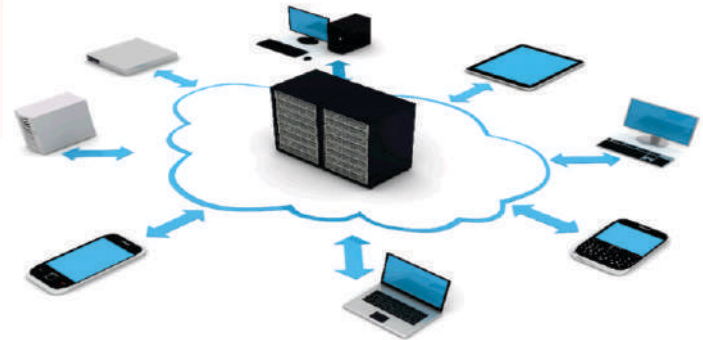


Annual Maintenance of computers and peripherals

Computers and other peripherals of the institute were placed under annual maintenance

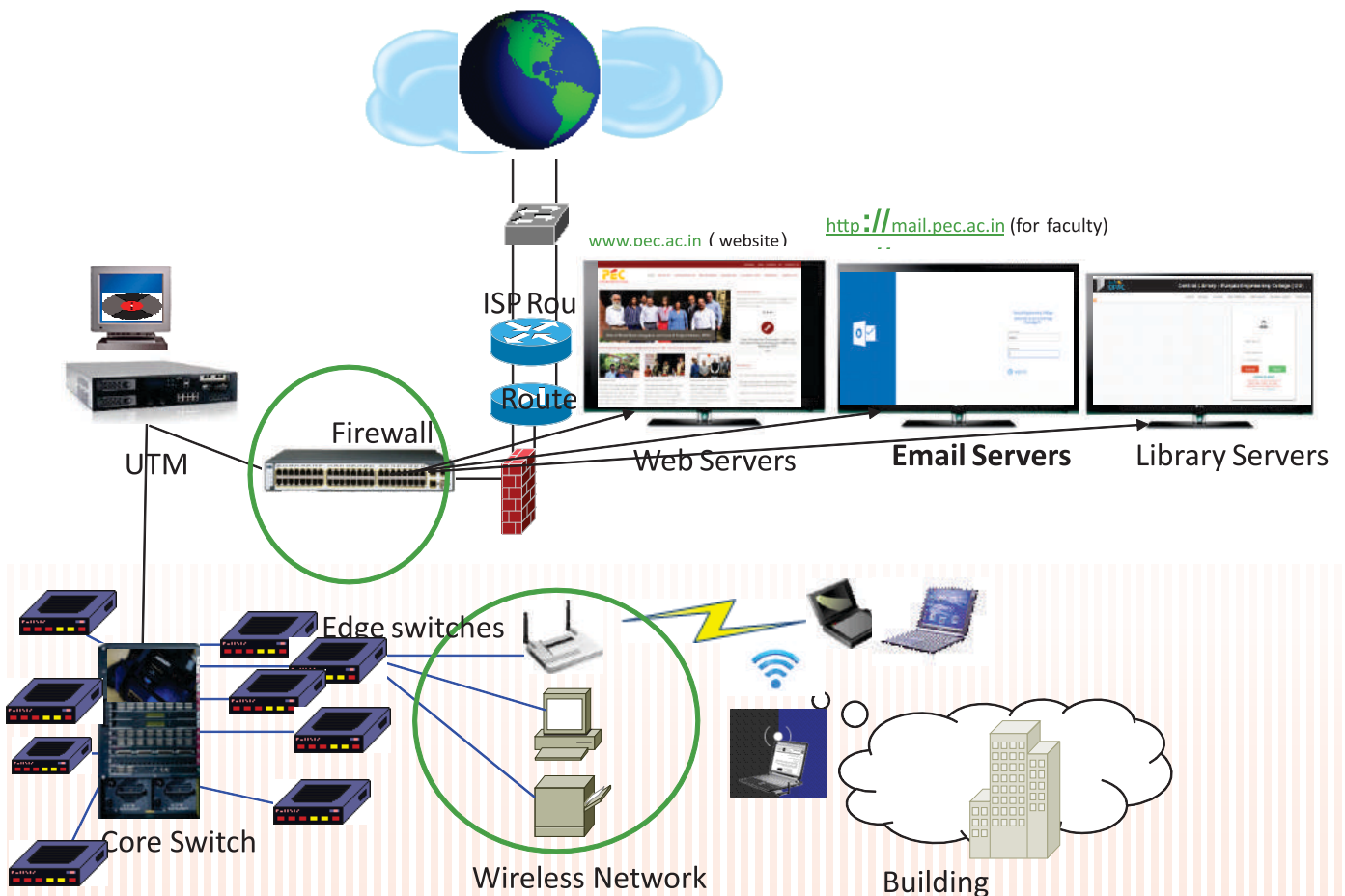
Augmentation of CAMPUS Network

25 new edge switches installed at various locations in the campus



Internet Bandwidth (1:1)

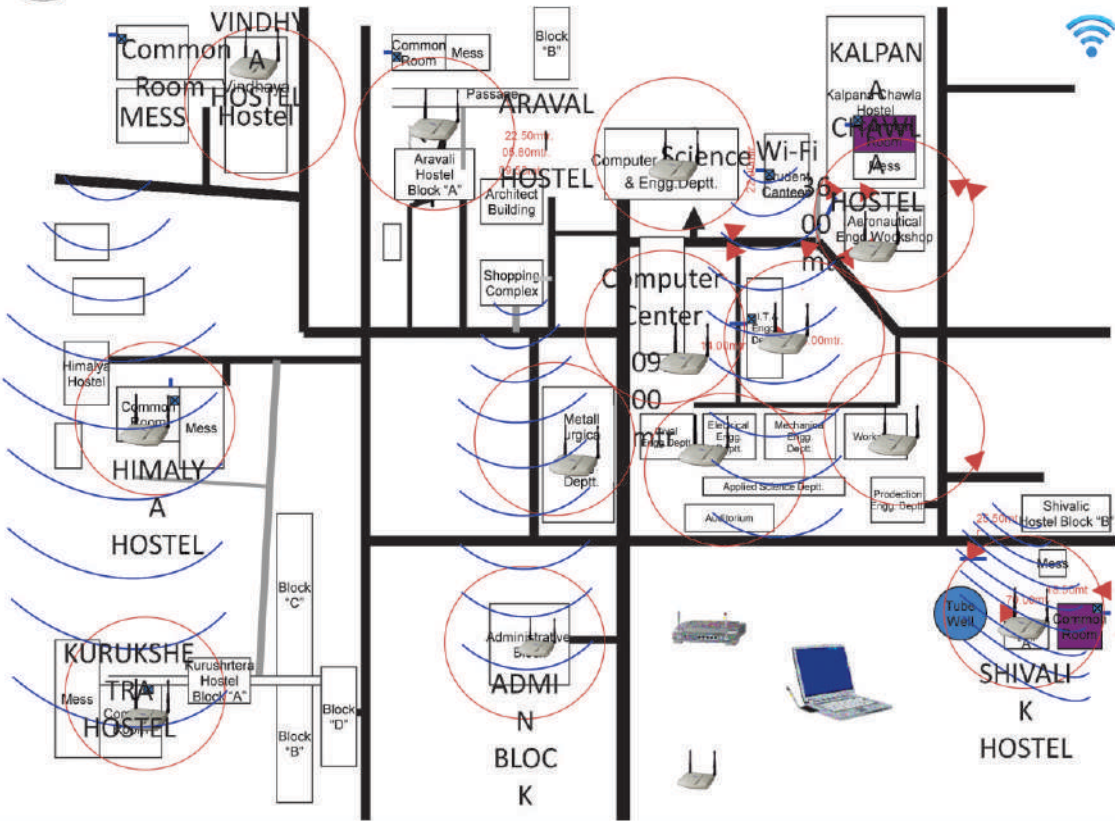
- ▶ 32 Mbps
- ▶ 1 Gbps from NKN
- ▶ 5 Mbps for Residence



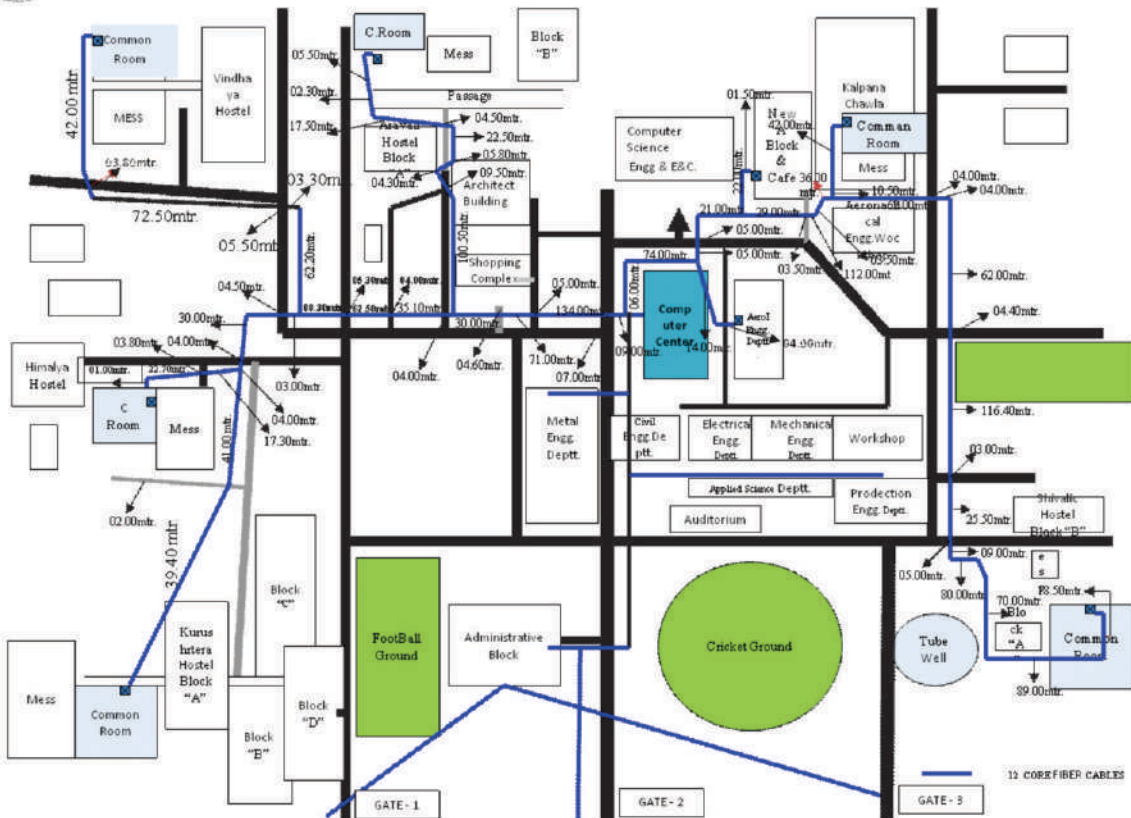
Campus Network Layout



Wireless layout



Fiber Layout



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COMPUTER CENTRE TEAM

Head Computer Centre

Dr. Sanjay Kumar Batish

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SUPPORTING STAFF

NAME	DESIGNATION
AMIT PATHANIA	SENIOR LABORTARY ATTENDENT
PAWAN KUMAR	CLERK CUM STORE KEEPER
RAMESH CHAND	HELPER
BHUPINDER SINGH	COMPUTER ATTENDENT (CONTRACTUAL STAFF)
RACHPAL	COMPUTER ATTENDENT (CONTRACTUAL STAFF)
AMIT	COMPUTER ATTENDENT (CONTRACTUAL STAFF)
SUBHAM GUPTA	JUNIOR LAB ATTENDENT
AMIT KUMAR	SERVICE ENGINEER
SATINDER SAINI	SERVICE ENGINEER