# Campus LAN & Internet Infrastructure

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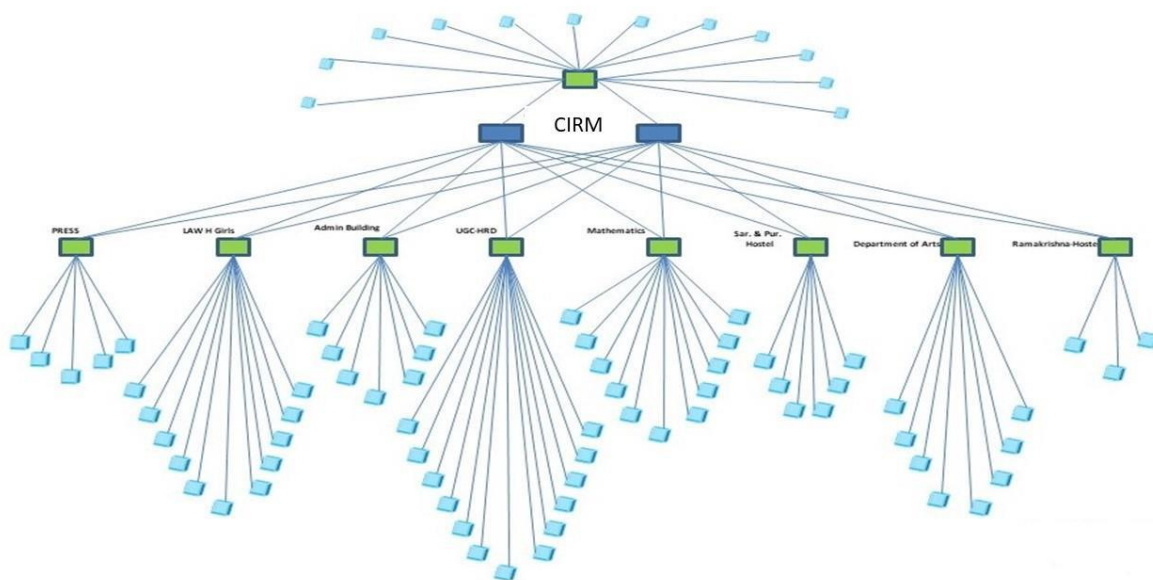
The University Network is an infrastructure of electronic and optical distribution hardware, control software, and wired and wireless media. The University network utilizes various technologies to transport data. The University network begins at the point where an end-user device gains access to this infrastructure and ends at the point where the University network attaches to external non-NBU networks.

The priorities for the University network are

- safety
- security
- economy
- reliability and
- capability

The University's goal is to ensure the integrity and stability of the University network, as well as the efficiency and effectiveness of its construction and operation.

Providing a centrally managed enterprise class campus wide network is most effective and efficient method for achieving University's goals in information transport. This reduces the total cost of ownership to the University and promotes the availability and reliability of its information transport systems for all users. Through central planning and management, the University ensures that the network infrastructure is constructed and operated in an integrated, effective, and efficient manner.

The University network is for the use of the University as a whole and is managed for the benefit of all University users. Therefore, the network is designed and implemented to handle a wide variety of

information transport requirements. This network is designed to satisfy most user needs for the transport of information. The campus-wide network supports IP-based CCTV and a state-of-the-art WiFi System.

- Active/Active failover with network load balancing.
- 10 G BACKBONE (Core to Distribution) & 1G Backbone (Distribution to Access)
- Centrally Managed Network System.
- Secured, Managed & Monitored Internet Access.
- Strong User Authentication policy.
- Policy driven network.

| ISP | Capacity | Remarks/ Type |
|---|---|---|
| BSNL (NME-ICT NKN Project) | 1Gbps | Support redundancy |
| Vodafone | 400Mbps | |

Redundant, Resilient, Upgradable, centrally managed are the state of the art network architecture

# Major Network Equipment
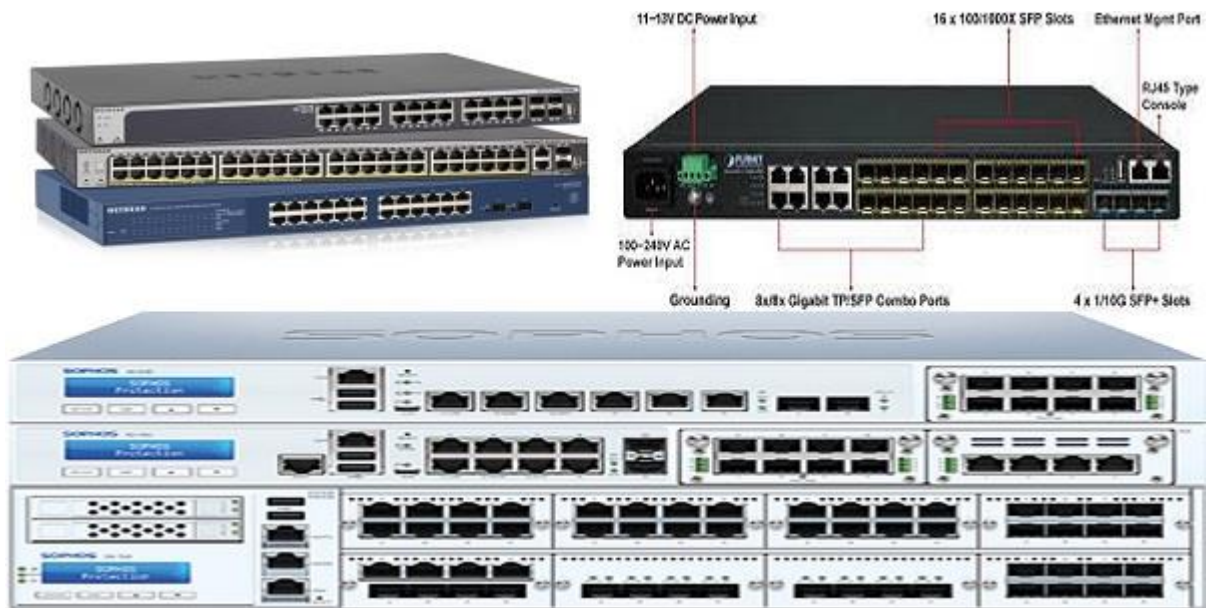


| Equipment | Quantity |
|---|---|
| L3 Core Switch | 01 |
| L3 Distribution Switch | 09 |
| L2 Access Switch (POE) | 33 |
| L2 Access Switch (Non POE) | 15 |
| UTM | 01 |

# Connect with NBU Network

All individual users should use their own authentication token to use the University Network either on LAN or on wireless or through VPN. Users can apply for the credential by simply clicking "Apply for Campus Connect" on https://nbu.ac.in/qls/remoteAccess.aspx

User Manual is available at https://nbu.ac.in/doc/qls/NBU-LAN-Manual.pdf