

10.4.2. Internet (10)

DEI continuously strives to provide state-of-the-art technologies and update its ICT facilities to ensure efficient functioning. Extensive infrastructure has been setup during the last five years:

1. IP based Surveillance System
2. IP based Telephony
3. Remote Laboratories
4. Cadence Design Software The infrastructure includes:
 - Desktops (Xeon, Intel i5, Dual Core , AMD processor based with 4 to 32 GB RAM and 500 GB to 8TB HDD)
 - Laptops (i7, i5- 6th generation, Core2Duo based 2.4 GHz with 4 to 8 GB RAM)
 - Total number of systems =15
 - 2 rack servers (Xeon 4.2 GHz, 32 GB RAM)

The IP Surveillance system and phone system was established in 2016 with the following configuration:

- IP camera (1.2 to 12 MP, sony, vivitek, Axis , canon, cp-plus) =300
- IP phone =200
- 8 NVR with 156 TB of storage
- 50 Cisco Switches
- 20 Km of Fiber Optic Cable. The additional Fiber Optic Cable laid in 2016 also connects various units of DEI such as the International Guest House and Seminar Hall Complex, Outer Boys Hostel, Tannery Campus, Girls Hostel II, Electrical Engineering Laboratory at Faculty of Engineering and Technical College, Library building in Faculty of Engineering, Shatabdi Bhawan, Faculty of Architecture and Psychology Department to the Institute LAN and for Internet access. Associated equipment such as ethernet and fiber switches were also installed at different locations.

In 2017, WIFI facility was installed with latest Cisco wireless controller 5520 and 30 Cisco Aironet 2802 series Wireless Access Points. All buildings, hostels, Seminar halls, conference rooms and common areas in the campus are now wi-fi enabled. Additional 16Mbps MPLS VPN Connectivity has been taken from BSNL for DEI Dayalbagh. More than 250 desktops have been added to create new laboratories and to replace legacy systems. These systems range from Intel i5 to i7 based systems.

Significant investment has been made to upgrade classrooms to e-classrooms/smart classrooms with the purchase of the following equipment:

- Sony VPL EW 536 With IQ Board
- Sony VPL-SW-536C Interactive Projector with White board
- Sony VPL EW 246 LCD Projector
- Digital Lectern with face plate KPS KPC 900 with Audio System
- Sony SRG-120DH Camera

- Network Controller KP-600U2
- Desktop Computers and Laptops for eClassrooms
- Polycom Real Presence Group 500 Solution
- LED TV 49"/50"
- Video Switcher/ Converters and Distributors

Microsoft MS Dreamspark license has been purchased for licenses to Microsoft products. Site License for Microsoft Office 365 has also been obtained for students and staff of DEI. The base SPSS package has also been purchased.

Tenders for purchase of Cisco ASA Firepower 2140 Firewall and Cisco Core Switch N9K-C9508 to upgrade the networking infrastructure in the Central Computer Center, GPON Network with accessories, BIOVIA Discovery Studio Teaching Suite, Mathematica, Robotmaster Education Bundle, Virtual Classroom solution, Multitouch Interactive Displays and Video Walls have been uploaded.