

IT facilities

Information Technology Centre (IT Centre) was established in year 2000 with an objective to create world class ICT infrastructure to facilitate Networking, Internet Services and Solutions for fulfilling Teaching, Research and Governance goals of the University. IT Centre received “My India Wi-Fi India Summit & Award - 2018” for the best enterprise Wi-Fi project in the country.

IT Centre has successfully installed and commissioned its campus wide network covering all University Teaching Departments (UTDs), administrative sections and hostels. The University has about 5000 network connections and 9000+ users covering buildings across two campuses. The University campus network named as DAVVNET consists of following three networks:

- 1.Campus wide Network (LAN) (departments/sections, two campuses)
- 2.Campus Wi-Fi network (Takshashila and Nalanda campuses including Hostels)
- 3.Hostel LAN (12 hostels in two campuses)

University is providing Internet services to all stakeholders through 1 GBPS Internet lease line connectivity obtained from National Knowledge Network (NKN). This connectivity along with developed IT infrastructure has been successfully used in conducting several online interactive workshops held under NMEICT.

University is running several IT and network support services such as email and web service, Proxy and Firewall services for access control, LDAP as authentication service, DNS for name to IP resolution. These services are centrally managed by IT Centre.

University e-Governance services are also made available through University web portal. These services are online admissions, results, registrations, various forms and fees submission. The Wi-Fi connectivity in DAVV campus started in the year 2006 with few UTDs and Currently it is upgraded to provide Wi-fi connectivity in all UTDs, hostels and administrative departments.

The hostel LAN connects all 12 hostels of the University to IT Center through Optical fibre backbone. Every room of the hostel has provision of two network points thus giving one I/O connectivity to every student residing in hostel.

DAVV IT Infrastructure Enhancement during 2014-2020

1. Hostel LAN backbone: Hostel network infrastructure was upgraded in the year 2015-16. This includes optical fibre backbone creation connecting 12 hostels of University. This work was carried out under NMEICT scheme with the total investment of Rs. 40 Lakh comprising of University contribution of worth Rs. 10 Lakh

2. Networking in Hostels: Commissioning of hostel LAN was completed in the year 2017 including the structured cabling of 1731 points in hostel rooms, installation of 42 switches. This

work was carried out by Madhya Pradesh State Electronics Development Corporation (MPSEDC) , Bhopal

3. Extension of Campus wide Network: The LAN commissioning of 914 points was also completed during 2017 in newly constructed buildings in Takshashila campus. This included structured cabling of points in various UTDs, installation of 26 network switches. Besides this, 50 switches were replaced in the existing network. This work was carried out by MPSEDC.

4. Hostel Wi-Fi Network: There are total 125 AP points that have been installed in hostels and University campus.

A total investment of Rs. 1.7 Crore has been made during 2014-19 which was debited from RUSA and UGC XII plan grants.



DEVI AHILYA VISHWAVIDYALAYA, INDORE

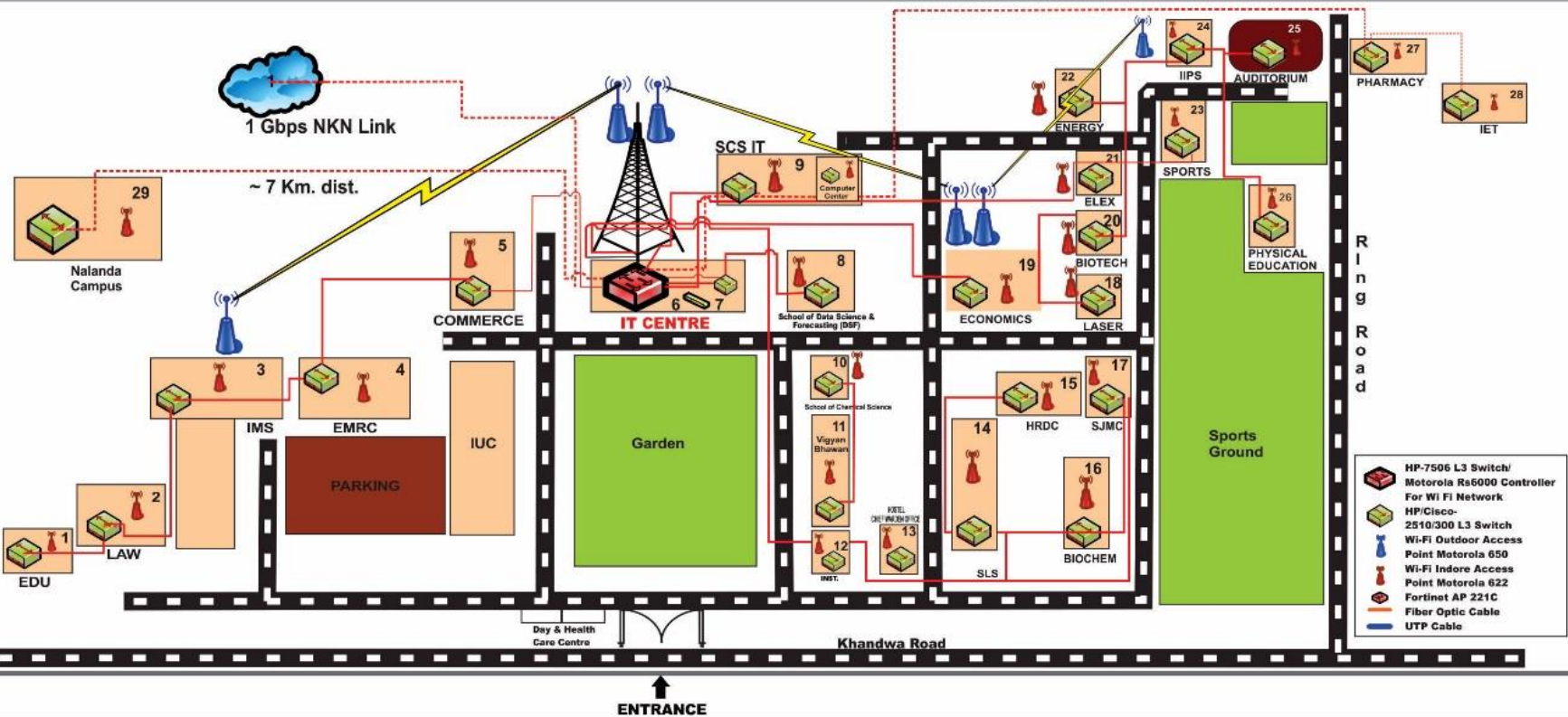
Vital Statistics about DAVV IT Infrastructure (DAVVNET)

<ul style="list-style-type: none"> ➤ Network Coverage <ul style="list-style-type: none"> ➤ Two Campuses, 38 Buildings, 12 Hostels ➤ Three Networks Covering <ul style="list-style-type: none"> - Campus Wide Network - Campus Wi-Fi Network - Hostel LAN 	<ul style="list-style-type: none"> ➤ Application Services: <ul style="list-style-type: none"> - University Admission Information System - University File Tacking System - Requirement and Information Gathering System - University Time Table and load management system - Student Information System
<ul style="list-style-type: none"> ➤ 45 Departments Interconnected 	<ul style="list-style-type: none"> ➤ 9000+ Users
<ul style="list-style-type: none"> ➤ 1 GBPS Internet Leased line through National Knowledge Network (NKN) 	<ul style="list-style-type: none"> ➤ 1000 Mbps Internal Bandwidth
<ul style="list-style-type: none"> ➤ Router Juniper M10i 	<ul style="list-style-type: none"> ➤ Fiber Optic Cable Length : -16 KM
<ul style="list-style-type: none"> ➤ Firewall: Fortigate-300 D UTM, :Cisco ASA 5520, Cyber roam 1000i 	<ul style="list-style-type: none"> ➤ UTP Cable Length : - 100 KM
<ul style="list-style-type: none"> ➤ Core Switch HP7500 Series 	<ul style="list-style-type: none"> ➤ Structured LAN Cabling
<ul style="list-style-type: none"> ➤ Edge Switches 248 Nos. (HP,HP, Aruba, Cisco, D-Link, Digisol) 	<ul style="list-style-type: none"> ➤ 5000+Connections on DAVV Network ➤ (2050 , New Connections 2950)
<ul style="list-style-type: none"> ➤ Wi-Fi Network Controller-2 No. (Motorola RFS-6000), 1 No. (Fortinet Controller Fortinet 300D) ➤ Wi-Fi Access Point-6 Nos. (Motorola AP-650), 36 Nos. (Motorola AP-622), 36 Nos. (Motorola AP-650), 125 Nos. (Fortinet AP-221C) 	<ul style="list-style-type: none"> ➤ Servers: Mail Server (mail.dauniv.ac.in), Web Server (www.dauniv.ac.in), LDAP, DNS , DHCP, User Identification (ID Server), Bandwidth Monitoring Server (MRTG), Research compendium , Library Server,
<ul style="list-style-type: none"> ➤ Controller based Wi-Fi Connectivity in UTD's at Takshashila Campus and Nalanda Campus 	
<ul style="list-style-type: none"> ➤ Total Investment Rs. More than Rs. 8 Crore 	
<ul style="list-style-type: none"> ➤ DAVV-NTPC Foundation ICT Centre for Visually Challenged Persons. 	

DAVV Campus Network Layout

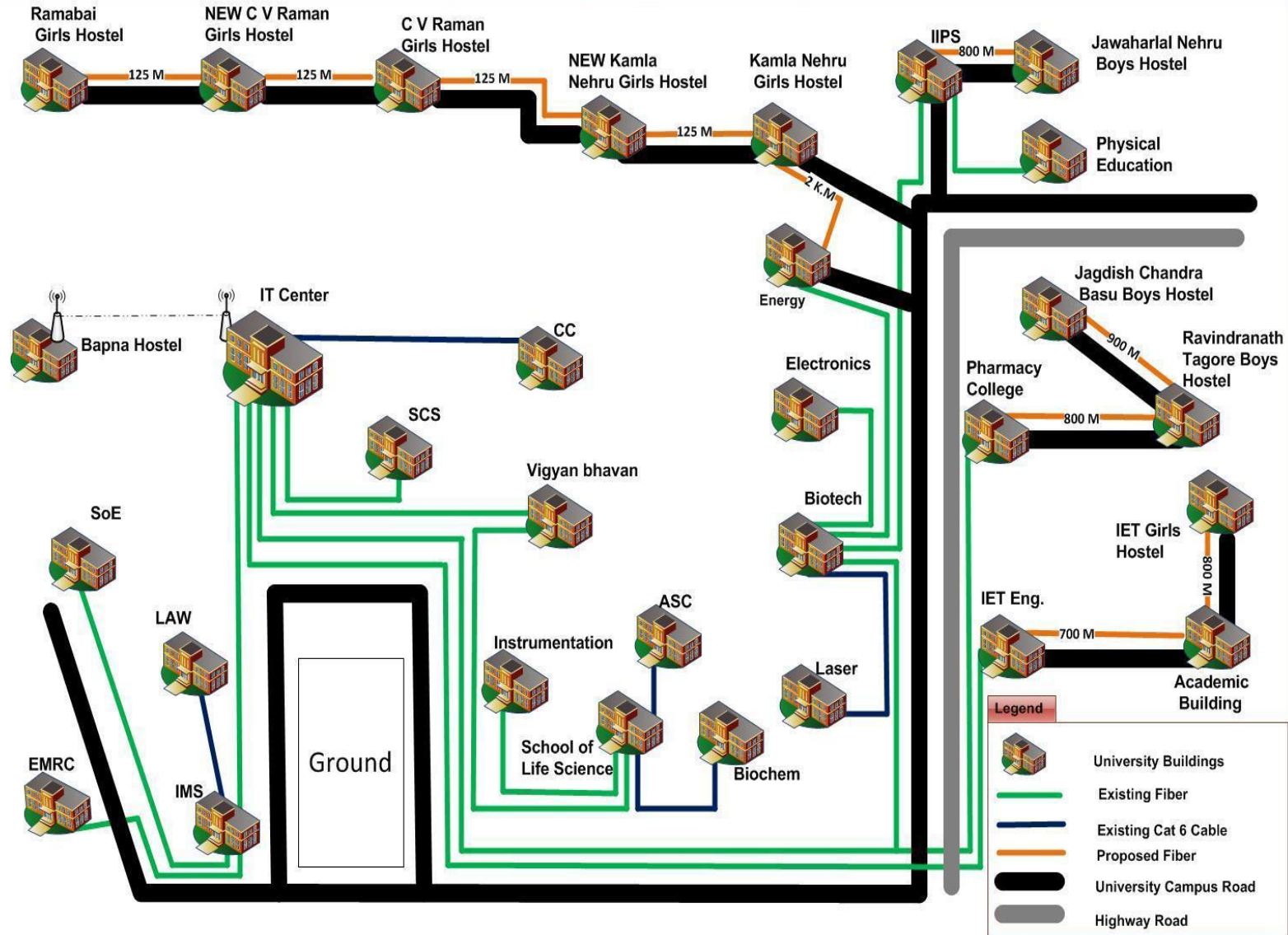


Devi Ahilya Vishwavidyalaya, Indore Takshashila Campus-wide Network Layout



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|------------------------------------|--|--------------------------------------|--------------------------------------|---|---|
| 1.School of Education | 6.Information Technology Centre | 11.Vigyan Bhawan | 16.School of Biochemistry | 21. School of Electronics | 26. School of Physical Education |
| 2.School of LAW | 7.Central Library | 12.School of Instrumentation | 17.School of Journalism & Mass Comm. | 22. School of Energy & Environmental Studies | 27. School of Pharmacy |
| 3.Institute of Management Studies | 8.School of Data Science & Forecasting (DSF) | 13.Hostel Chief Warden Office | 18.Laser Science & Application | 23. Sports | 28. Institute of Engineering & Technology |
| 4.Electronic Media Research Centre | 9.School of Computer Science & IT | 14.School of Life Sciences | 19.School of Economics | 24. International Institute of Professional Studies | 29. Nalanda Campus |
| 5.School of Commerce | 10.School of Chemical Science | 15.Human Resource Development Centre | 20.School of Biotechnology | 25. Auditorium | |
- Vigyan Bhawan Includes
1. School of Physics
 2. School of Mathematics
 3. School of Statistics
 4. School of Comp. Lang. & Culture.
 5. Deen Dayal Upadhyay Kaushal Kendra (DDU-KK)

DAVV University Fiber Route Diagram



Institute of Engineering & Technology
Devi Ahilya Vishwavidyalaya Indore

A Report on
IT Facilities at IET-DAVV

We have following IT facilities available in the institute:

- Student Feedback System (Developed by IET Students)
- Library System (Developed by Third-Party)
- Exam Panel Generation System (Developed by IET Students)
- Result Processing System (Developed by IET Students)
- Grade Entry System (Developed by IET Students)
- Student Attendance System (Developed by IET Students)
- Course Management System (Moodle)
- Institute Email System (Using Google Apps for Education)

- Institute's Website (Managed by Institute)

Here, let's look at an overview of all these systems:

- **Student Feedback System:** We have an automated student feedback system, where we can schedule a student feedback for a class and we can generate the feedback report for all the classes. This system is developed by IET students and it is under operation since April 2016. The institute has shifted from manual feedback collection on it and encouraging and achieving paperless system for collecting Student Feedbacks.
- **Library System:** We have a library system where records of all books are kept digitized. Through the software, books issue and returns are done using barcode scanning. Moreover, students can search for the books available in the institute's library.
- **Exam Panel Generation System:** We have recently deployed the exam panel generation software which helps in generating exam panel (Theory, Practical exams) for semester examination. This system is developed by IET students. The systems assigns internal examiners and external examiners for each subjects according to subject schema. The appointment letters to internal examiners and external examiners are mailed directly using the system. The system allows to take the printout of the panel which is used later for approval of the panel.
- **Result Processing System:** We have a result processing system which generates the semester results for CBCS and non-CBCS courses. This system provides online grade-sheets immediately after declaration of results. This system supports online requests for college leaving certificates and provisional degrees. Students get confirmation mail once the certificates are ready.

- **Grades Entry System:** We have an online grading system that offers online submission of grades by faculty members. This system is developed by IET students. It also provides the facility of submission of test and end-semester exam marks. It supports all types of grades submission and also validates the erroneous entries filled by faculties by mistake. The system contributes significantly in announcing the semester results on time.
- **Student Attendance System:** We also have a Student attendance system where regular class attendance is maintained. The system is developed by IET students and the system supports a web interface and also an android based mobile application. The system allows to take attendance real-time using mobile system or offline using web interface. The system also supports generating various reports like short of attendance list or any customized criteria for generating attendance report.
- **Course Management System:** The institute also has a Moodle, an open source course management system which is used to maintain courses online. Many faculty members are hosting their course material on Moodle. The students gets benefited by downloading the course material and submit the assignments online. Moodle also allows to conduct quizzes online.
- **Institute Email System:** We are using Google Apps for education (GBoard) service which allows students and faculty members to have an official email id. This service is provided by Google to all educational institutes freely. We are maintaining various groups for better communication among students and faculty members. At present, there are more than 2500 active email accounts.
- **Institute's Website:** The institute's website is hosted and managed by the institute. We also have a student's team which also contributes and give suggestions to improve the website.