

**G. Narayanamma Institute of Technology and Science (For Women)**  
**(AUTONOMOUS)**

**Department of ECE**  
**Advanced Communication Networks**

The Advanced Communication Networks Lab is to explore and experiment with advanced technologies, protocols, network configuration, and Quality of Service analysis in the field of communication networks. The primary objective of the Advanced Communication Networks Lab is to implement various protocols like routing, trunking protocol, MPLS Label Distribution Protocol etc., in the areas of advanced communication protocols, network architectures, and emerging technologies. The lab serves as a hub for research, development, and practical implementation of innovative solutions to address the evolving challenges in communication networks. The lab is equipped with state-of-the-art infrastructure and resources to support a wide range of experiments and projects. The infrastructure enables students to design, implement, and evaluate novel communication solutions.

**Area: 66 Square meters**

**Faculty associated with ACN Lab**

S. No	Name of the faculty	Designation	Area of research
1	A Sujatha Reddy	Asst. Prof.	Wireless Communications
2	G Karuna	Lab Asst.	-

**Photos**



Fig. Advanced Communication Networks Laboratory

## Facilities

The lab is available with the following equipment and software. The facilities are available for all faculty and students who would like to participate in computer networks R&D activities.

**Software:** Graphical Network Simulator 3

S.No.	Name of the Equipment	Significance/ Utility features	No. of Items	Cost in (Rs.)
1	Computer Systems	HP Desktop 280G2MT (i3)(x9w00AV) i3-6100/6th Gen 4GB RAM/1TB HDD DOS, LED 18.5" Backlit Monitor (V5E94AA) model.	18	5,22,500.00/-
2	Online UPS	5KVA/192 DC	01	46,020.00/-
Total Amount (Rs)				5,65,770.00/-

## Academic projects carried out by students

Batch No.	Roll No.	Title of the Project	Name of the Supervisor
B13	18251A04A9	Comparative Analysis of TCP Congestion Control Algorithms using NETSIM	Mrs.E.V.S.S. Vyshnavi
	18251A0471		
	18251A0477		
	18251A0494		
C8	18251A04G3	Impact of Distance on Throughput for Different Wireless LANS	Mrs.E.V.S.S. Vyshnavi
	18251A04E0		
	18251A04D2		
	18251A04E2		
C10	18251A04F9	IOT Based Smart Home System Using CISCO Packet Tracer	K Swathi
	18251A04G7		
	19255A0418		
	18251A04H3		
A19	17251A0416	Performance analysis of Interior Gateway Protocols using GNS-3	Mrs.E.V.S.S. Vyshnavi
	17251A0407		
	17251A0451		
	17251A0433		

## Outcomes of the Student's Academic Projects

S.No.	Title of the Paper	Name of the Conference / Journal	Year	Status of the Paper
1	Comparative Analysis of TCP Congestion Control Algorithms using NETSIM	GIS Science Journal	2022	Published

