G. Narayanamma Institute of Technology and Science

AUTONOMOUS (For Women)

Department of ECE

MICROWAVE ENGINEERING LAB

Microwave Engineering Lab has a carpet area of 84.77 sq.m and can accommodate 24 to 36 students. Students are grouped in batches of 3 to perform experiments. The experiments are related to Microwave generator characteristics, microwave components, waveguide parameters and antenna radiation pattern are performed. All the equipment operates in the X-Band (8 to 12 GHz frequency). The Microwave lab has equipment worth Rs.16,73,350 Lakhs.

Lab In-charge

Dr.Swapna Raghunath,
Professor, ECE Department.
swapna.raghunath@gnits.ac.in

Faculty associated with Microwave Engineering Lab

S. No	Name of the faculty	Designation	Area of research
1	Dr.Swapna Raghunath	Professor	Microwave and Radar Engineering
2	Dr.G.Srivalli	Associate Professor	Microwaves and Waveguides
3	Mrs.N.Krishna Jyothi	Assistant Professor	Microstrip Patch Antennas
4	Mr.P.Satyanarayana Goud	Assistant Professor	Microwaves and Signal Processing
5	Mr.Y.Prakash	Assistant Professor	Microwaves and Antennas
6	Mrs.P.Lavanya	Assistant Professor	Communications
7	Mrs.G.Radhika	Lab Assistant	Communications and Microwaves

Microwave Engineering Lab

Microwave Bench Setup

Gunn Oscillator Characteristics

VSWR measurement of Horn Antenna

Hardware Kits

S.No	Major Equipment	Quantity
1	Klystron power supply solid state	12
2	Klystron tube with mount	12
3	Solid state VSWR meter	8
4	Gunn power supply	4
5	Gunn Oscillator	4
6	Slotted Section with probe carriage	9
7	Dual trace C.R.O's and 2 channel digital storage C.R.O's	5&3
8	Microwave Power Meter	1
9	Antenna Radiation Pattern Measurement Setup	1
10	Microstrip Patch Antennas	6

Dr Swapna Raghunath as Reviewer and Editorial board member

Nature of Contribution	Details of associated Organization /Journal / Conference etc.
Editorial Board Member	Journal of Satellite Oceanography and Meteorology, Whioce Publishling Pte. Ltd., Singapore
	International Journal of Atmospheric and Oceanic Sciences, Science Publishing Group, USA
Reviewer	1. IEEE Transactions on Geoscience and Remote Sensing (IEEE TGRS) 2. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 3. IEEE Geo Science and Remote Sensing Letters (IEEE GRSL) 4. IEEE ACCESS 5. Journal of Advances in Space Research, Elsivier 6. Journal of Measurements, Elsivier 7. Advances in Civil Engineering, Hindawi Publishers 8. International Conference on Soft Computing and Signal Processing (ICSCSP-2018), Springer Publications, June 22-23, 9. Second International Conference on Soft Computing and Signal Processing (ICSCSP-2019),Springer Publications, June 21-22, 2018 10. Third International Conference on Soft Computing and Signal Processing (Springer ICSCSP20), August 2020.

Dr.Swapna Raghunath - Awards and Recognitions

- Education Expo TV Companies Rating System (EET CRS) 6th Faculty Branding Awards – 18 "Award for Excellence in Research" in July, 2018

- GNITS Star Woman of the Year, March 2022

Details of Faculty Professional Body Memberships

S. No	Faculty Name	Membership No.				
		IEEE	ISTE	IETE	IEI	Internet Society
1	Dr.Swapna Raghunath			F-222219		
2	Dr.G.Srivalli	94031005	LM 71091	F-502932	F1238716	WAMS3021
3	Y.Prakash			M-502938		

Academic projects carried out by Student Projects during 2021-22

Batch No.	Roll No.	Title of the Project	Name of theSupervisor
A9	19255A0405	Compact wearable Antenna for Biomedical Telemetry Applications	Dr.G.Srivalli
	18251A0413		
	18251A0417		
A11	18251A0409	Microstrip Phased array with Beam Scanning for Satellite Applications	Dr.G.Srivalli
	18251A0451		
	18251A0425		
	18251A0411		
C7	18251A04C7	Design and Analysis of Dual Circular Polarized Antenna	Mrs.N.Krishna Jyothi
	18251A04E5		
	18251A04D7		
	18251A04J0		

C8	18251A04E6	Micro Strip Patch Antenna Based On FSS Using HFSS	Mrs.N.Krishna Jyothi
	18251A04E9		
	18251A04G8		
	19255A0415		