



Department of Electronics and Communication Engineering	LP: EC22611
B.E/B.Tech/M.E/M.Tech : ECE Regulation: R2022	Rev. No: 00
PG Specialization : Not Applicable	Date:22.01.2025
Sub. Code / Sub. Name: EC22611/ANTENNA AND MICROWAVE ENGINEERING LABORATORY	

Session No*	List of Experiments
MICROWAVE BASED EXPERIMENTS	
1	Verification of mode characteristics of reflex klystron
2	Study of V-I characteristics of the Gunn diode
3	Study of characteristics of three port circulator and two port isolator
4	Study and measurement of indirect frequency and guide wavelength of rectangular waveguide
5	S Matrix formulation of a Directional coupler
6	Measurement of VSWR and reflection coefficient for the given unknown load using slotted line technique.
SIMULATION BASED EXPERIMENTS	
8	Design and analysis of Rectangular Waveguide
9	Design and analysis of a microstrip transmission line with characteristic impedance (Z ₀) 50 ohm
10	Design of a rectangular microstrip patch antenna and analyze its radiation characteristics.
11	Design and analysis of 3 element Yagi-Uda antenna and calculate beam-width, front/back ratio, and gain of the antenna.
12	Construction of E-plane, H-plane and Magic Tee junctions and compare its field distributions.
	Design of an array antenna
	Design and analysis of microstrip LPF
Content beyond syllabus (if any):	
1. Analog and Digital Link	
2. Measurement of Numerical Aperture	



* Session Duration: 150 minutes



SRI VENKATESWARA COLLEGE OF ENGINEERING

COURSE DELIVERY PLAN - LABORATORY

Sub. Code/Sub. Name: : EC22611/ANTENNA AND MICROWAVE ENGINEERING LABORATORY

	Prepared by	Approved by
Signature		
Name	Mrs.K.Srividhya, Mr.S.Senthilrajan, Mr.P.Muhtukumaran, Mrs.C.Gomatheeswari Preethika & Mr.L.K.Balaji Vignesh	Dr. G.A. Sathish Kumar
Designation	Assistant Professor	Professor and Head
Date	22.01.2025	22.01.2025
Remarks* :		
Remarks* :		

* If the same lab plan is followed in the subsequent semester/year it should be mentioned and signed by the Faculty and the HOD