



<b>Course: M.Tech. (Electronics &amp; Communication Engineering)</b>	<b>Name of Faculty: Dr. Deepti Das Krishna</b>
<b>Topic: 20-437-0114 ANTENNA DESIGN LAB</b>	<b>Semester: FIRST</b>
<b>Lecture Hall: ANTENNA DESIGN LAB</b>	<b>Timings: as per CBCS</b>

## Set of experiments

1.	Familiarization with antenna measurement setup- X Band Set up / Network Analyser. To measure the input return loss of different antennas as a function of frequency and to determine its centre frequency and 10dB return loss bandwidth. To measure the gain of different antennas using two identical antennas
2.	Computer aided design, simulation and analysis of basic antenna types: Dipole, Horn (different types), Patch (various types of feed and different polarizations).
3.	Measurement of antenna characteristics from the radiation patterns of standard antennas- using a Network Analyser in an anechoic chamber: Horn, Dipole, Vivaldi, Spiral etc.
4.	Design, simulation, fabrication and measurement of a Patch Antenna for a given operating frequency and for a given substrate eg. 1.88GHz with $\epsilon_r = 4.4$ , $h=31$ mils - using a Network Analyser in an anechoic chamber