

15P1WPH215 Microstrip Antenna Design

Subject Code	15P1WPH215	
Subject Name	Microstrip Antenna Design	
Credits	3	Contact Hours: 03
Module No.	Subtitle of the Module	Topics
1.	Antenna Fundamentals	Definitions, Simple Radiating Systems, Analysis of Antenna Arrays , Radiation Pattern Synthesis using Arrays, Line Sources
2.	Wire Antennas	Dipoles, Yagi-Uda Array, Loop Antenna, Traveling Wave Antennas, Broadband Antennas
3.	Microstrip Antennas	Microstrip Antenna Patterns, Microstrip Patch Bandwidth and Surface-Wave Efficiency, Rectangular Microstrip Patch Antenna, Quarter-Wave Patch Antenna
4.	Circular Microstrip Patch	Circularly Polarized Patch Antennas, Compact Patches, Directly Fed Stacked Patches, Aperture-Coupled Stacked Patches
5.	Patch Antenna Feed Networks	Series-Fed Array, Microstrip Dipole, 330 6-13 Microstrip Franklin Array, Microstrip Antenna Mechanical Properties

Recommended Reading (Books/Journals/Reports/Websites etc.: Author(s), Title, Edition, Publisher, Year of Publication etc. in IEEE format)	
1.	J. L. Volakis, "Antenna Engineering Handbook", 4th ed. New York: McGraw Hill, 2007
2.	C. A. Balanis, Antenna Theory: Analysis and Design, 1st ed., Harper & Row, 790 p., 1982; 2nd ed., Wiley, 941 p., 1997. ; 3rd ed., Wiley
3.	J. R. James and P. S. Hall, Eds., Handbook of Microstrip Antennas, Vols. I and II, IET - Peregrinus, 1350 p., 1989
4.	J. R. James, P. S. Hall, and C. Wood, Microstrip Antenna Theory and Design, IET-Peregrinus, Electromagnetic Waves Series 12, 290 p., 1981