

EL 350 - RF & Microwave Circuits for Wireless Communication w/Lab

4 Credit Hours

Review of electromagnetics; Maxwell's equations, plane wave solutions, transmission lines. Introduction to AWR/ADS microwave CAD software, Types of transmission lines and their properties; coaxial lines, microstrip, and stripline, Network analysis, scattering matrix, transmission matrix formulations, Matching networks: lumped element designs and limitations, single and double-stub tuned designs, Active microwave circuit design, Amplifier design; gain and stability, design for noise figure, Noise in microwave circuits.