

SECOND YEAR

Communication Transmission Lines	COE203
Prerequisite : None	(2-2-0-0)

Introduction. The Lumped-Element Circuit Model for a Transmission Line. Circuit theory for parallel plate transmission line. Two wire transmission line. Coaxial cable transmission line. Electromagnetic wave modes in T.L: TEM wave along a parallel plate T.L. lossy- parallel plate T.L. Generation T.L equation: Wave characteristic on an infinite T.L. T.L. parameters. Attenuation constant from power relations. Wave characteristics of finite T.L.: T.L. as circuit elements. Lines with resistive termination. Lines with arbitrary termination. T.L. circuits. Smith chart: Smith chart calculation for lossy lines. T.L. impedance matching: Impedance matching by quarter wave transformer, Single stub matching.