

Electromagnetics (1) [3 – 0 – 1]

Course #:0904245

Prereq.: 0300122+0904201

Vectors. Coordinate systems and transformation. Electrostatics: Coulomb's law, Gauss's law, electric potential, electric dipoles, resistance, capacitance, boundary condition.

Magnetostatics: Biot-Savart law, Ampere's law, Magnetic forces. Magnetic

boundary conditions. Time varying fields: Faraday's Law, Maxwell's equations.