

EL 340 - Introduction to Electromagneticswith Lab

4 Credit Hours

Introduces major concepts and quantitative methods in electrostatics, magnetostatics, modeling of dielectrics and magnetic materials. Also includes time varying electromagnetic fields and Maxwell's equations, related mathematical models (boundary value problems) at different levels of complexity aided by computer labs. Brief introduction of some application examples including radio frequency (RF)/ microwave circuits, waveguides, and antennas, magnetic storage, optics, and numerical methods (with basics of some popular electronic design automation [EDA] software packages) will also be included.

Prerequisites

[MA 315](#)