

# EECE 304: Electromagnetic Theory I

Electric fields, flux and potential, Coulomb's Poisson's and Gauss's laws, permittivity and conductivity, magnetostatics, magnetic materials, magnetic materials and forces, Biot-Savart law and time varying fields, Maxwell's equations in integral and differential forms, time-domain analysis of waves. Application of electromagnetic theory to transmission lines.

**Credits:** 3

**Prerequisites/Permissions:**

MATH 158, PHYS 014. Course Offering: Fall Semester

**Program:**

## Electrical Engineering

### COURSE DESCRIPTIONS