

# ECE 3500: Electronic Materials & Devices

Physics of crystal structures, energy bands, Fermi level, charge carriers, the pn junction, and excess carriers. Devices: diodes, bipolar junction transistors and field effect transistors. Three lecture hours and a two-hour practicum per week.

**Credits:** 4

**Prerequisites:**

ECE 2054

ECE 2510 :D- or ECE 2051 :D- or ECE 2054 :D-

**Program:** [Electrical and Computer Engineering](#)