ELECTRICAL ENGINEERING (EE)

EE 206. Circuit Analysis

Credits: 3

Prerequisite: MATH 166.

Corequisite: MATH 227 and concurrent registration in, or previous successful completion of, EE 206L.

Typically Offered: FALL

Introduction to electric circuit components. Fundamental laws of circuit analysis. Steady state analysis of DC and AC circuits. Electric power calculations. Topics include Ohms law, Kirchhoffs laws, DC and AC circuit analysis using the node voltage and mesh current techniques, source transformations, sinusoidal steady state circuit analysis and passive circuit components, i.e., resistors, capacitors, and inductors.

EE 206L. Circuit Analysis Lab

Credits: 1

Corequisite: Concurrent registration in, or previous successful completion of, EE 206.

Typically Offered: FALL

Introduction to the methods and construction of experimental linear electric circuits containing resistors, inductors, and capacitors driven by constant and sinusoidal voltage sources. Operational amplifier circuits introduced for laboratory instrumentation applications. Circuit simulation software used for circuit design and analysis.