EEE 6374 RF Devices and Circuits

Credits: 3 credits


Specific course information

Catalog description: RF filter design, active RF components and modeling, matching and biasing networks, RF oscillators and mixers, use of RF CAD software for system simulation.

Prerequisites: EEL 3470 Electromagnetic Fields & Waves

Specific goals for the course: RF filter design, active RF components and modeling, matching and biasing networks, RF oscillators and mixers, use of RF CAD software for system simulation.

Brief list of topics to be covered:

1. Transmission line analysis and the Smith chart
2. Single- and multi-port RF networks
3. RF filter design
4. Active RF components and modeling
5. Matching and biasing networks
6. Oscillators, mixers, and frequency synthesizers
7. CAD simulation of RF devices and circuits