EEL 6593 Mobile Communication

Credits: 3 credits


Specific course information:

Catalog description: Introduction to modern wireless communications: basic components, radio propagation and noise, modulation and frequency-division multiple access, coding and time-division multiple access, spread spectrum and code-division multiple access, diversity, capacity and space-division multiple access, wireless architectures.

Prerequisites: 1. EEL 4512 Communication Systems, 2. EEL 4541 Stochastic Process and Random Signals

Specific goals for the course: The goal of this course is to introduce the student to the fundamentals of radio propagation, wireless communications and communication-theoretic aspects of multiple-access techniques.

Brief list of topics to be covered:

1. Physical Properties of Wireless Channels
2. Modulation and Frequency-Division Multiple Access
3. Coding and Time-Division Multiple Access
4. Spread Spectrum and Code-Division Multiple Access
5. Diversity, Capacity, and Space-Division Multiple Access