

ECSE 510. FILTERING AND PREDICTION FOR STOCHASTIC SYSTEMS.

Credits: 3

Offered by: Electrical & Computer Engr (Faculty of Engineering)

This course is not offered this catalogue year.

Description

Electrical Engineering: Basic notions. Linear state space (SS) systems. Least squares estimation and prediction: conditional expectations; Orthogonal Projection Theorem. Kalman filtering; Riccati equation. ARMA systems. Stationary processes; Wold decomposition; spectral factorization; Wiener filtering. The Wiener processes; stochastic differential equations. Chapman-Kolmogorov, Fokker-Plank equations. Continuous time nonlinear filtering. Particle filters. Applications.

- (3-0-6)
- Prerequisites: ECSE 500 and ECSE 509 or equivalent.

Most students use Visual Schedule Builder (VSB) to organize their schedules. VSB helps you plan class schedules, travel time, and more.

[Launch Visual Schedule Builder](#)