

# ECSE 509. PROBABILITY AND RANDOM

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Credits: 3

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

Terms offered: Fall 2025

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## Description

Multivariate Gaussian distributions; finite-dimensional mean-square estimation (multivariate case); principal components; introduction to random processes; weak stationarity: correlation functions, spectra, linear processing and estimation; Poisson processes and Markov chains: state processes, invariant distributions; stochastic simulation.

- (3-1-5)
- Prerequisites: (ECSE 206 or ECSE 316) and ECSE 205.

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