

MECH 296B–Optimal Estimation of Dynamic Systems

Spring 2017

Course Description: Introduction to Least-Squares approximation, review of probability concepts in Least-Squares, review of dynamic systems, parameter estimation, sequential state estimation including the discrete and continuous form of Kalman filter, extended and unscented Kalman filters, applications of state estimation in guidance, navigation, and control (GNC) of aerospace vehicles.(4 units.)

Prerequisite: MECH 323 or equivalent.

Textbook: *Optimal Estimation of Dynamic Systems*, John L. Crassidis and John L. Junkins, Chapman & Hall/ CRC Press, 2004.

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