MECH6323 - Robust Control Systems

MECH 6323 (EECS 6323 and SYSE 6323) Robust Control Systems (3 semester credit hours) Theory, methodology, and software tools for the analysis and design of model-based control systems with multiple actuators and multiple sensors. Control oriented model parameterizations and modeling errors. Definitions and criteria for robust stability and performance. Optimal synthesis of linear controllers. The loop shaping design method. Methods to simplify the control law. Mechatronic design examples. Prerequisite: MECH 4310 or equivalent and MECH 6300 or EECS 6331 or SYSM 6307 or equivalent. (3-0) T