

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
Department of Electrical Engineering

EE 550-01 **LINEAR CONTROL SYSTEMS**
Second Semester 2004/2005

Instructor: Dr. Samir AL-Baiyat

List of Possible Projects March 12, 2005

1. Subspace Identifications
2. System Identification and Model Reduction
3. Genetic Algorithms: Applications to Control Systems
4. Advances in Neural Network Applications.
5. Applications of Variable Structure Systems.
6. Model Reduction of Linear and Nonlinear Systems.
7. Robust H_∞ and H_2 Control.
8. Nonlinear H_∞ Control
9. Design via Feedback Linearization.
10. Fuzzy Logic Controller Design.
11. Optimal Control of Power Systems.
12. Control of Singularly Perturbed Systems.
13. Linear Matrix Inequality Techniques in Control Theory.
14. Active Control of Wind-Turbines.
15. Wavelet Transforms With Applications to Control Systems.
16. Filtering and Estimation.
17. Nonlinear Control Applications.
18. Identification of Linear and Nonlinear Systems.
19. Model Predictive Control