

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
Department of Electrical Engineering

EE 550-01 LINEAR CONTROL SYSTEMS
Second Semester 2006/2007

Instructor: Dr. Samir AL-Baiyat

List of Possible Projects **March 3, 2007**

1. Design of Seismic Migration Digital Filters Using Model Reduction Techniques
2. Transformations and equivalences of non-linear systems and models
3. Fault-Tolerant Control
4. Non-Linear Observers
5. Subspace Identifications
6. System Identification and Model Reduction
7. Applications of Variable Structure Systems.
8. Model Reduction of Linear and Nonlinear Systems.
9. Robust H_∞ and H_2 Control.
10. Nonlinear H_∞ Control
11. Design via Feedback Linearization.
12. Optimal Control of Power Systems.
13. Control of Singularly Perturbed Systems.
14. Wavelet Transforms With Applications to Control Systems.
15. Nonlinear Control Applications.
16. Model Predictive Control
17. Hankel Operators and Their Applications