



**Reading List for the PhD Comprehensive Exam
Control Specialization
(Academic Year 2010 – 2011)**

(I) Stochastic control

- State Estimation of Discrete-Time Systems (Kalman Filter)
Chapter no.5 in Stochastic Optimal Linear Estimation and Control by Meditch
- Stochastic Optimal Control of Discrete-Time Systems
Chapter no.9 in Stochastic Optimal Linear Estimation and Control by Meditch
- Parameter Estimation
Chapter no.10 in Systems: Decomposition, Optimization and Control by
M.G.Singh and A. Titli

(II) Nonlinear Control

- Approximate Analysis Methods
Chapter no.4 in Nonlinear Systems Analysis by Vidyasagar
- Stability in the sense of Lyapunov
Chapter no.5 in Nonlinear Systems Analysis by Vidyasagar

(III) Optimal Control of Discrete-Time Systems

- Quadratic Optimal Control Systems
Chapter no.8 in Discrete-Time Control Systems by Ogata

(IV) Optimal Control of Continuous-Time Systems

- An Introduction to Optimal Control Theory
Chapter no.18 in Modern Control Theory by Brogan
- Dynamic Optimization for low order systems
Chapter no.5 in Systems: Decomposition, Optimization and Control by M.G.Singh
and A. Titli

Subject Selected by Adviser

Responsible Faculty: The head of the advising committee of the student.