

Robust Control Theory

Prerequisite

- Undergraduate Control Theory
- Undergraduate Linear Algebra
- Linear System Theory – Helpful but not required
- MATLAB
- C Language - Optional

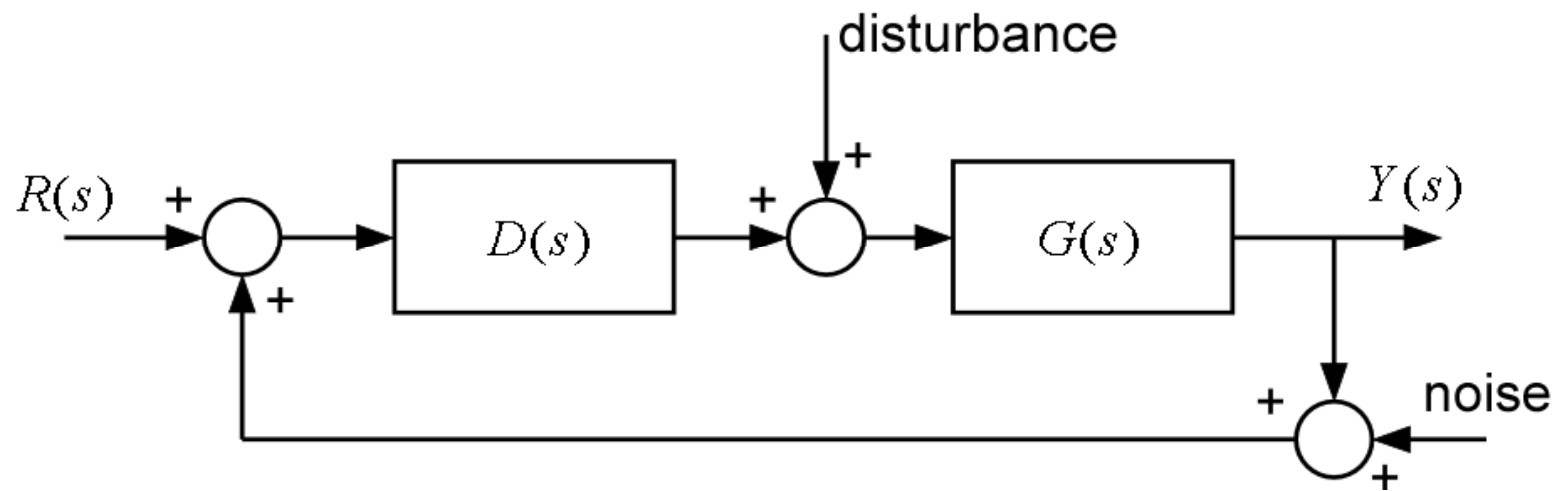
Text Book

- Chapter 2. Multivariable Linear Systems
- Chapter 3. Vector Random Processes
- Chapter 4. Performance
- Chapter 5. Robustness
- Chapter 6. The Linear Quadratic Regulator

Text Book

- Chapter 7. The Kalman Filter
- Chapter 8. Linear Quadratic Gaussian Control
- Chapter 9. Full Information Control and Estimation
- Chapter 10. H infinity Output Feedback
- Chapter 11. Controller Order Reduction

Robust Control



Robust Control

- Uncertainty: Modeling Uncertainty
- Disturbances: External Disturbances, Noise

- Classical Control: Relative Stability
- Gain Margin, Phase Margin

- Optimal Control vs. Robust Control