

Objective: This course provides a basic understanding of linear multivariable systems through their modeling and analysis. Both continuous-time and discrete-time systems will be discussed in the course. After taking this course, the student will be in a position to move on to more advanced courses and topics in systems, control, communications and signal processing.

TENTATIVE COURSE OUTLINE

- Overview
- Mathematical Description of Systems
 - Input-Output Description
 - State-Variable Description
- State Space Solutions and Realization
- Stability of Linear Systems
- Controllability and Observability
- Canonical Decomposition
- Minimal Realizations
- State Feedback and State Estimators
- Other Topics as Time Allows