ECSE 307. LINEAR SYSTEMS AND CONTROL.

Credits: 4

Offered by: Electrical & Computer Engr (Faculty of Engineering)

Terms offered: Fall 2025

View offerings for Fall 2025 in Visual Schedule Builder.

Description

Modelling and simulation of control systems, review of LTI systems, time response of first and second order systems, state space modeling, controllability, state feedback and pole placement, observability, observer design, and output feedback, block diagrams and their simplification, Routh-Hurwitz stability criterion, system type and steady state errors, Bode plots, Nyquist plots, Nyquist stability criterion, gain and phase margins, lead-lag compensators. Lab work involving step response, frequency response, system identification, state feedback, output feedback, and lead-lag compensators.

- (3-4-5)
- Prerequisite(s): ECSE 206 and ECSE 210
- (3-4-5)