COURSE DETAIL

MECHANICAL SYSTEM CONTROL
Country Korea, South
Host Institution Yonsei University
Program(s) Yonsei University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 136
UCEAP Course Suffix
UCEAP Official Title MECHANICAL SYSTEM CONTROL
UCEAP Transcript Title MECH SYSTEM CONTROL
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description
The course introduces the basics of designing and analyzing feedback control systems using classical control methods. The class starts with basic reviews of dynamic systems and modeling. Topics covered include: feedback control concepts, transfer functions, linear and nonlinear modeling, time response, block diagrams, system stability, steady-state errors, Root Locus diagrams, compensator design and Bode diagrams. Students learn mathematical modeling and analysis of dynamic systems, the fundamentals of feedback control theory, stability considerations, and analysis and design of feedback systems in time and frequency domains. Course objectives are understanding mathematical modeling techniques for dynamic systems, understanding of the fundamental concepts of feedback control systems, and learning controller design methods in both time and frequency domains. Textbook: Norman S. Nise, CONTROL SYSTEMS ENGINEERING.

Language(s) of Instruction
English

Host Institution Course Number
MEU3680

Host Institution Course Title
MECHANICAL SYSTEM CONTROL

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mechanical Engineering

Print