

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 Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mechanical Engineering

Course Last Reviewed

[Print](#)