

学部 2 単位 / Undergraduate 2 Credits

FEN-CO5975L2 国際連携工学特別講義 XI

International Collaborators' Lecture on Engineering XI

大学院 2 単位 / Graduate School 2 Credits

3799-395 国際連携特別講義 XXII

International Collaborators' Special Lecture on Engineering XXII

Lecturer

Assistant Professor **Joon Ho Kang**

Department of Mechanical Engineering,
College of Engineering, Seoul National University
(SNU)



Modeling and Control of Biological Systems

Friday, January 24~Thursday, January 30, 2025 (5 days)

● Course objectives

To learn how to identify, analyze, and design control strategies for biological systems..

● Lecture time

January 24~29 ... 9:00 ▶ 12:30

January 30 ... 9:00 ▶ 12:30

13:30 ▶ 17:00 (Exam)

● Lecture room

Eng. Bldg. No.2 #211

● Language

English

● Counterpart at UTokyo

Lecturer Timothée Mouterde

Department of Mechanical Engineering,

School of Engineering

● Lecture plan

Day 1:

Introduction and regular lectures

Day 2 - 4:

Regular lectures, with one midterm quiz (subject to change)

Day 5:

AM Regular lectures

PM Exam

This course explores the fundamental principles of modeling and control theory as applied to these remarkable biological phenomena. Students will learn how to identify, analyze, and design control strategies for biological systems, integrating mathematical models, experimental data, and computational simulations. Topics covered include feedback control, system identification, stochastic modeling, and bioinstrumentation, providing students with the necessary knowledges and skills to effectively navigate the intricate dynamics of living systems using mechanical engineering principles.

工学系研究科国際工学教育推進機構

Institute for Innovation in International Engineering Education,
School of Engineering

Contact: H. Sugiura

email: ut-snu@cce.t.u-tokyo.ac.jp

Registration is
now open!

Please use the QR code
to register.

