

MINI SYLLABUS

2024 Ajou-Kyushu Summer School on Applied Mathematics

Modeling and Analysis of Control Systems

- **Period:** July 8–12, 2024
- **Lecturer:** Assoc. Prof. Nguyen Dinh Hoa, IMI, Kyushu University.
- **Keywords:** Ordinary Differential Equation, Linear Algebra, State Space, Transfer Function, Stability

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Lecture	Date & Time	Lecture content
1	July x,	Preliminaries of system and control; Ordinary differential equation
2	July y,	Laplace transform; Transfer function; Routh-Hurwitz stability criterion
3	July z,	State space; Stability criteria for state space models

※ Note: there will be a lot of examples on realistic systems during the lectures.

- **Final project:** in form of group project, each group choose one of the given topics.