UE Linear optimal control

ECTS
3 credits

Component
UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)

Semester
Automne

- **Teaching language(s):** English
- **Open to exchange students:** Yes
- **Code d'export Apogée:** PAX7ECAI

Presentation

Description

Deterministic Linear Quadratic Regulator (LQR), Riccati equations, stochastic linear optimal control, Kalman filter, Linear Quadratic Gaussian (LQG) control, discrete-time linear optimal control and observers.

Objectives:

Solutions of optimal control and optimal state estimation problems with quadratic costs for deterministic and stochastic linear systems, in continuous and discrete-time.

Course parts

UE Linear optimal control - CM/TD	Lectures (CM) & Teaching Unit (UE)	16h
UE Linear optimal control - TP	Practical work (TP)	12h

Recommended prerequisites

Non-contractual information.
Last update on 05 December 2023

Previous courses on linear systems control given by Robu and Prieur.

Useful info

Campus

- Grenoble - Scientific Polygon

Non-contractual information.
Last update on 05 December 2023