COURSE DETAIL

CONTROL ENGINEERING I

Country
Spain

Host Institution
Carlos III University of Madrid

Program(s)
Carlos III University of Madrid

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Electrical Engineering

UCEAP Course Number
115

UCEAP Course Suffix
A

UCEAP Official Title
CONTROL ENGINEERING I

UCEAP Transcript Title
CONTROL ENGINEERING

UCEAP Quarter Units
5.00

UCEAP Semester Units

3.30

Course Description

This course focuses on how to understand, model, and control dynamic systems used in engineering and industry. It uses tools such as Laplace transforms, block diagrams, and transfer functions to represent systems and study how systems respond over time and across different frequencies using methods like Bode and Nyquist diagrams. This course explores feedback control, Root Locus analysis, and the design and tuning of PID controllers to connect theory with practical control and automation applications.

Language(s) of Instruction

Host Institution Course Number
14026

Host Institution Course Title
INGENIERÍA DE CONTROL I

Host Institution Course Details
https://aplicaciones.uc3m.es/cpa/generaFicha?est=223&asig=14026&idioma=2

Host Institution Campus
LEGANÉS

Host Institution Faculty
Escuela Politécnica Superior

Host Institution Degree
Grado en Ingeniería Electrónica Industrial y Automática

Host Institution Department
Departamento de Ingeniería de Sistemas y Automática

Course Last Reviewed
2025-2026

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