COURSE DETAIL

INSTRUMENTATION AND MEASUREMENTS

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
114

UCEAP Course Suffix
E

UCEAP Official Title
INSTRUMENTATION AND MEASUREMENTS

UCEAP Transcript Title
INSTRUMNT&MEASURMNT

UCEAP Quarter Units
5.00

UCEAP Semester Units

3.30

Course Description

This course discusses fundamental concepts in instrumentation and measurements. Topics include: multimeter, signal generator, and oscilloscope; vector network analyzer; lock-in amplifier; interfacing sensors and digital systems; data acquisition equipment and virtual instrumentation; sensors; analog signal conditioning circuits; noise and signal-to-noise ratio; modulation techniques and circuit components; signal sampling and processing; analog to digital and digital to analog converters; digital signal processing.

Prerequisites: Signals, Systems and Circuits; Electronic Engineering Fundamentals.

Language(s) of Instruction
English

Host Institution Course Number
18322

Host Institution Course Title
INSTRUMENTACIÓN Y MEDIDA

Host Institution Course Details
https://aplicaciones.uc3m.es/cpa/generaFicha?est=363&anio=2021&plan=434&asig=18...

Host Institution Campus
Leganés

Host Institution Faculty
Escuela Politécnica Superior

Host Institution Degree
Grado en Ingeniería Física

Host Institution Department
Departamento de Tecnología Electrónica

Course Last Reviewed
2021-2022

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