

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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