COURSE DETAIL

INTEGRATED CIRCUIT TECHNOLOGY

Country
Taiwan

Host Institution
National Taiwan University

Program(s)
National Taiwan University

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Electrical Engineering

UCEAP Course Number
114

UCEAP Course Suffix

UCEAP Official Title
INTEGRATED CIRCUIT TECHNOLOGY

UCEAP Transcript Title
INTEGRATED CIRCUIT

UCEAP Quarter Units
4.50

UCEAP Semester Units
3.00

Course Description

This course introduces the integrated circuit process, basic theory and technology, equipment principle and application of each stage of the process, and emphasizes the cooperation of process integration and development of forward-looking component processes. The content is based on the CMOS process, and contains a discussion of various components. Content includes: Modern Electronic Device Technology; Crystal Growth, Wafer Fabrication and Basic Properties of Silicon Wafers; Semiconductor Manufacturing; Lithography; Thermal Oxidation; Diffusion; Ion Implantation; Thin Film Deposition; Etching; Back-end technology; Metallization and Chemical Mechanical Polishing; Process Integration and IC Processing Technology.

Language(s) of Instruction
English

Host Institution Course Number
EE5114

Host Institution Course Title
INTEGRATED CIRCUIT TECHNOLOGY

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electrical Engineering

Course Last Reviewed
2022-2023

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