COURSE DETAIL

INTRODUCTION TO PHYSICAL ELECTRONICS
Country Korea, South
Host Institution Korea Advanced Institute of Science and Technology (KAIST)
Program(s) Korea Advanced Institute of Science and Technology, KAIST
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Electrical Engineering
UCEAP Course Number 33
UCEAP Course Suffix
UCEAP Official Title INTRODUCTION TO PHYSICAL ELECTRONICS
UCEAP Transcript Title INTRO PHYS ELECTRNC
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course introduces the fundamental properties and characteristics of solid-state materials and structures used in modern semiconductor devices and integrated circuit (IC) technologies.

Topics include Solid-State Electronics and applications, Crystal structure of solids, Introduction to quantum mechanics, Introduction to the quantum theory of solids, Semiconductor in equilibrium, Carrier transport phenomena, Excess carriers in semiconductors, The pn junction.

Language(s) of Instruction
English

Host Institution Course Number
EE.20011

Host Institution Course Title
INTRODUCTION TO PHYSICAL ELECTRONICS

Host Institution Course Details
https://erp.kaist.ac.kr/com/lgin/SsoCtr/initExtPageWork.do?link=estblSubjt

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2025-2026

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