

# COURSE DETAIL

## SOLID STATE ELECTRONICS

**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**

113

**UCEAP Course Suffix****UCEAP Official Title**

SOLID STATE ELECTRONICS

**UCEAP Transcript Title**

SOLID STATE ELECTR

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

## Course Description

This course covers the basics of semiconductors. Topics: Crystal Structure of Solids; Introduction to Quantum Mechanics and The Quantum Theory of Solids; Semiconductor in Equilibrium; Carrier Transport Phenomena; Nonequilibrium Excess Carrier in Semiconductor; Junction Theory and Diode; Metal Semiconductor Contacts and Heterojunctions (Metal Semiconductor Contacts and Heterojunctions).

## Language(s) of Instruction

English

## Host Institution Course Number

EE3013

## Host Institution Course Title

SOLID STATE ELECTRONICS

## 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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