

COURSE DETAIL

SEMICONDUCTOR FUNDAMENTALS

Country

Singapore

Host Institution

Nanyang Technological University

Program(s)

Nanyang Technological University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Electrical Engineering

UCEAP Course Number

112

UCEAP Course Suffix**UCEAP Official Title**

SEMICONDUCTOR FUNDAMENTALS

UCEAP Transcript Title

SEMICONDUCTOR FDMTL

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course serves as a foundation course on Semiconductors. It covers a broad range of fundamental concepts in semiconductors such as basics of semiconductors and their properties, semiconductor in equilibrium/non-equilibrium, carrier transport phenomena, and operating principles of a semiconductor diode, metal-semiconductor contacts, and MOSFET.

Language(s) of Instruction

English

Host Institution Course Number

EE2103

Host Institution Course Title

SEMICONDUCTOR FUNDAMENTALS

Host Institution Course Details

<https://www.ntu.edu.sg/eee/admissions/programmes/undergraduate-programmes/curri...>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Electrical and Electronic Engineering

Course Last Reviewed

2025-2026

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