COURSE DETAIL

BASIC CIRCUIT THEORY
Country Korea, South
Host Institution Yonsei University
Program(s) Yonsei University
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Electrical Engineering
UCEAP Course Number 50
UCEAP Course Suffix
UCEAP Official Title BASIC CIRCUIT THEORY
UCEAP Transcript Title CIRCUIT THEORY
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

Students learn about the basic concepts of electric circuits including; circuit elements, Kirchhoff’s law, basic RLC circuits, circuit theorems, Op Amp, sinusoidal steady-state analysis, frequency response and Laplace transform. Topics include Electric circuit variables, Circuit Elements, Simple Resistive Circuits, Techniques of Circuit Analysis, The Operational Amplifier, Inductance, Capacitance, and Mutual Inductance, Response of First-Order RL and RC Circuits, Natural and Step Responses of RLC Circuits, Sinusoidal Steady-State Analysis, and Sinusoidal Steady-State Power Calculations.

Prerequisites: Engineering mathematics, Differential Equations

Language(s) of Instruction
English

Host Institution Course Number
EEE2010

Host Institution Course Title
BASIC CIRCUIT THEORY

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electrical and Electronics Engineering

Course Last Reviewed
2023-2024

Print