COURSE DETAIL

CIRCUIT ANALYSIS
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 114
UCEAP Course Suffix
UCEAP Official Title CIRCUIT ANALYSIS
UCEAP Transcript Title CIRCUIT ANALYSIS
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course focuses on the fundamental principles of circuit theorems and circuit elements, DC/AC and three-phase circuits, transient and steady-state responses, circuit analysis using Laplace transforms. Students learn various techniques ('tools') to analyze the operation of real circuits with a focus on the study of the behavior of the circuit, not the creation of circuits, i.e., the engineering design of the circuit. Topics include capacitors and inductors, Fourier series, Laplace transform, and sinusoids and phasors.

Language(s) of Instruction
English

Host Institution Course Number
EE2101

Host Institution Course Title
CIRCUIT ANALYSIS

Host Institution Course Details
https://wis.ntu.edu.sg/webexe/owa/AUS_SUBJ_CONT.main_display

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
School of Electrical and Electronic Engineering

Course Last Reviewed
2025-2026

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