COURSE DETAIL

ANALOG CIRCUITS 3
Country United Kingdom - Scotland
Host Institution University of Edinburgh
Program(s) University of Edinburgh
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Electrical Engineering
UCEAP Course Number 117
UCEAP Course Suffix
UCEAP Official Title ANALOG CIRCUITS 3
UCEAP Transcript Title ANALOG CIRCUITS 3
UCEAP Quarter Units 4.00
UCEAP Semester Units 2.70

Course Description

This course gives students an intuitive feel for the basic building blocks of analogue circuits. This course also teaches students how to analyze and design discrete and integrated CMOS based analogue circuits. Topics include MOS transistor model, linear and saturation regions, dc equations, MOS capacitances; small signal equivalent circuits and analysis; CMOS current mirrors, simple and cascode inverters, source follower plus differential amplifier circuits; differential amplifier circuits with gain and bandwith of simple amplifiers; and use of LTSPICE for circuit simulation. (The course builds on material presented in the second year.)

Language(s) of Instruction
English

Host Institution Course Number
ELEE09026

Host Institution Course Title
ANALOGUE CIRCUITS 3

Host Institution Course Details
http://www.drps.ed.ac.uk/24-25/dpt/cxelee09026.htm

Host Institution Campus
Edinburgh

Host Institution Faculty
School of Engineering

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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