

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 bandwidth 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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