

COURSE DETAIL

ELECTRONIC CIRCUITS

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Electrical Engineering

UCEAP Course Number

115

UCEAP Course Suffix**UCEAP Official Title**

ELECTRONIC CIRCUITS

UCEAP Transcript Title

ELECTRONIC CIRCUITS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

Building on basic circuit concepts, this course introduces the operating principles of transistors and how they are used in amplifier circuits. It discusses the foundational concepts of transistor amplifiers and analyses their performance. It also introduces operational amplifiers as a circuit component and describes how functional analog circuits, which can be applied to solving complex engineering problems, can be designed and analyzed using operational amplifiers. LTSpice is introduced as a circuit analysis tool. To augment learning, two laboratory sessions are included focusing on the topics of single transistor amplifiers and Op-Amp circuits, respectively.

Language(s) of Instruction

English

Host Institution Course Number

EE2027

Host Institution Course Title

ELECTRONIC CIRCUITS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Electrical and Computer Engineering

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