

COURSE DETAIL

MICROELECTRONICS WITH DESIGN AND MANUFACTURING 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

137

UCEAP Course Suffix**UCEAP Official Title**

MICROELECTRONICS WITH DESIGN AND MANUFACTURING 3

UCEAP Transcript Title

MICROELECTRONICS 3

UCEAP Quarter Units

8.00

UCEAP Semester Units

5.30

Course Description

This course provides students with an in-depth understanding of electronic device operation as well as the fabrication techniques used in their manufacture, and it introduces students to the design and manufacture of electronic products and the importance of quality control and design for manufacture. It covers the basics of semiconductor physics, the important building blocks of the p-n junction and MOS capacitor, and the operation and fabrication of MOS and bipolar transistors. Students are also introduced to electronics industry relevant materials relating to product design and manufacture as well as the important developments that are driving future technologies.

Language(s) of Instruction

English

Host Institution Course Number

ELEE09034

Host Institution Course Title

MICROELECTRONICS WITH DESIGN AND MANUFACTURING 3

Host Institution Course Details

<http://www.drps.ed.ac.uk/24-25/dpt/cxelee09034.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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