COURSE DETAIL

INTRODUCTION TO ELECTRICAL ENGINEERING

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Berlin

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Electrical Engineering

UCEAP Course Number

20

UCEAP Course Suffix

UCEAP Official Title

INTRODUCTION TO ELECTRICAL ENGINEERING

UCEAP Transcript Title

INTRO ELECTRIC ENG

UCEAP Quarter Units

5.50

UCEAP Semester Units

3.70

Course Description

This course offers an introduction to electrical engineering specifically for Electrical Engineering majors. Topics covered include: electrostatic field, charge, field, potential, voltage, polarization, capacity; stationary electric flow field, current, Ohm's law, resistance, power; stationary magnetic field: flow rate, inductance, permeability, magnetic circuits; induction, Inductance, Energy, Motion Induction, Resting Induction; simple networks: current and voltage sources, Kirchhoff sets, resistor networks; mathematical basics. vector calculus, integral calculus, orthogonal coordinate systems.

Language(s) of Instruction

German

Host Institution Course Number

0431 L 725

Host Institution Course Title

INTRODUCTION TO ELECTRICAL ENGINEERING

Host Institution Campus

FAKULTÄT IV ELEKTROTECHNIK UND INFORMATIK

Host Institution Faculty

Host Institution Degree

Host Institution Department

Energie- und Automatisierungstechnik

Print