

## 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**

GRUNDLAGEN DER ELEKTROTECHNIK

**Host Institution Course Details****Host Institution Campus**

FAKULTÄT IV ELEKTROTECHNIK UND INFORMATIK

**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Energie- und Automatisierungstechnik

**Course Last Reviewed**

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