

# COURSE DETAIL

## THERMODYNAMICS I

**Country**

Germany

**Host Institution**

Technical University Berlin

**Program(s)**

Technical University Berlin

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mechanical Engineering

**UCEAP Course Number**

101

**UCEAP Course Suffix**

A

**UCEAP Official Title**

THERMODYNAMICS I

**UCEAP Transcript Title**

THERMODYNAMICS I

**UCEAP Quarter Units**

14.00

**UCEAP Semester Units**

9.30

### **Course Description**

This course explores the fundamentals of thermodynamics including heat, energy, and the first two laws of thermodynamics. The course examines applications of thermodynamic principles such as power and refrigeration processes. The course reviews topics including thermodynamics properties of gases and liquids, real substances, quasi-static state changes and technical processes, exergy, gas mixtures, combustion, and air humidity. The course consists of lectures (which discuss course concepts), tutorials, and seminars (in which students solve problems).

### **Language(s) of Instruction**

German

### **Host Institution Course Number**

0330 L 444/445/446

### **Host Institution Course Title**

THERMODYNAMICS I

### **Host Institution Campus**

FAKULTÄT III PROZESSWISSENSCHAFTEN

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Ingenieurwissenschaftliche

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