# **COURSE DETAIL**

# **FLUID MECHANICS II: TECHNIQUE AND EXAMPLES**

# **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**

100

#### **UCEAP Course Suffix**

В

#### **UCEAP Official Title**

FLUID MECHANICS II: TECHNIQUE AND EXAMPLES

### **UCEAP Transcript Title**

FLUID MECH II: TECH

### **UCEAP Quarter Units**

5.50

#### **UCEAP Semester Units**

### **Course Description**

This course is the second of two fluid mechanics courses that are taught concurrently in a single semester. Students take Fluid Mechanics I and then either Fluid Mechanics II (Higher Flow Level) or Fluid Mechanics II (Technique and Examples). The course discusses topics including hydrostatics, kinematics of fluids, streamline theory of inviscid fluids, momentum and angular momentum, movement of compressible fluids, Navier-Stokes equation of motion and its applications, vortices and boundary layer flows, turbulent flows, pipe flows, flow around bodies, and similarity laws of fluid dynamics. The course consists of two hour lectures which review the course concepts, and two hour seminars in which students solve problems.

### Language(s) of Instruction

German

#### **Host Institution Course Number**

0531 L 103,0531 L 10

#### **Host Institution Course Title**

STRÖMUNGSLEHRE II - TECHNIK UND BEISPIELE

#### **Host Institution Course Details**

https://moseskonto.tu-

berlin.de/moses/modultransfersystem/bolognamodule/beschre...

### **Host Institution Campus**

### **Host Institution Faculty**

FAKULTÄT V VERKEHRS- UND MASCHIENENSYSTEME

### **Host Institution Degree**

## **Host Institution Department**

Strömungsmechanik und Technische Akustik

# **Course Last Reviewed**

2021-2022

<u>Print</u>