# **COURSE DETAIL**

## **PYTHON FOR DATA ANALYSIS AND VISUALIZATION**

# **Country**

Germany

#### **Host Institution**

Technical University Berlin

## Program(s)

**Technical University Summer** 

### **UCEAP Course Level**

Lower Division

## **UCEAP Subject Area(s)**

**Computer Science** 

### **UCEAP Course Number**

52

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

PYTHON FOR DATA ANALYSIS AND VISUALIZATION

## **UCEAP Transcript Title**

PYTHON DATA VISUAL

## **UCEAP Quarter Units**

4.00

#### **UCEAP Semester Units**

2.70

### **Course Description**

In this course, the fundamentals of Python are covered, with a special focus on the skills necessary for in-depth data analyses and data visualization. These two skills are fundamental in a wide range of disciplines, including but not limited to STEM (Sciences, Technology, Engineering and Mathematics) and Humanities fields of study. This course will cover the following: data types and compound data structures, conditional statements and loops, Python functions, importing, exporting and analyzing different types of data using pandas, visualizing data using Matplotlib and Seaborn, and developing interactive plots with Plotly. At the end of the two weeks course, students will work and present a final personal data analytics and visualization project.

# Language(s) of Instruction

English

**Host Institution Course Number** 

**Host Institution Course Title** 

PYTHON FOR DATA ANALYSIS AND VISUALIZATION

**Host Institution Campus** 

**TUBS** 

**Host Institution Faculty** 

**Host Institution Degree** 

**Host Institution Department** 

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