# **COURSE DETAIL**

## **PHILOSOPHY OF MATHEMATICS**

## **Country**

Germany

#### **Host Institution**

Technical University Berlin

## Program(s)

Technical University Berlin

#### **UCEAP Course Level**

**Upper Division** 

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

Philosophy Mathematics

### **UCEAP Course Number**

108

### **UCEAP Course Suffix**

#### **UCEAP Official Title**

PHILOSOPHY OF MATHEMATICS

## **UCEAP Transcript Title**

PHILOSOPHY OF MATH

## **UCEAP Quarter Units**

4.50

#### **UCEAP Semester Units**

3.00

### **Course Description**

In this course, students learn about a number of key topics in the philosophy of mathematics. It ensure students are familiar with the main views such as Platonism, nominalism, logicism, formalism, intuitionism, and structuralism, as well as the main criticisms of each. Students learn about the philosophical significance of Russell's paradox and Gödel's incompleteness theorems. From here, they consider topics in the philosophy of mathematical practice, such as the nature of mathematical proofs, the use of diagrams in mathematical reasoning, explanation and understanding in mathematics, mathematical knowledge, and the ethics of mathematics.

## Language(s) of Instruction

English

### **Host Institution Course Number**

3130 L 018

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

PHILOSOPHY OF MATHEMATICS

### **Host Institution Campus**

Technische Universität Berlin

# **Host Institution Faculty**

**Host Institution Degree** 

# **Host Institution Department**

Institut für Philosophie, Literatur-, Wissenschafts- und Technikgeschichte

**Print**