# **COURSE DETAIL**

#### **IMAGE PROCESSING FOR REMOTE SENSING**

# **Country**

Germany

#### **Host Institution**

Technical University Berlin

## Program(s)

Technical University Berlin

# **UCEAP Course Level**

**Upper Division** 

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

**Electrical Engineering Computer Science** 

#### **UCEAP Course Number**

143

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

IMAGE PROCESSING FOR REMOTE SENSING

## **UCEAP Transcript Title**

**IMG PROC REMOT SENS** 

## **UCEAP Quarter Units**

5.50

#### **UCEAP Semester Units**

3.70

#### **Course Description**

This course will introduce fundamental concepts and techniques in the content of remote sensing and image processing for Earth observation from space. The course starts by introducing core concepts in remote sensing (describing the processes by which images are captured by sensors mounted on satellite and airborne platforms and key characteristics of the acquired images). Then, fundamental methodologies for processing, analyzing, and visualizing remotely sensed imagery are introduced. Topics include representation of high-dimensional remote sensing images, time domain representations, filtering and enhancement. Practical applications will be provided throughout the course. Participants of this course will gain theoretical and practical knowledge on fundamental concepts and techniques for processing and analysis of remote sensing images acquired by Earth observation satellite and airborne systems.

## Language(s) of Instruction

English

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

40937

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

IMAGE PROCESSING FOR REMOTE SENSING

# **Host Institution Campus**

**Host Institution Faculty** 

**Host Institution Degree** 

# **Host Institution Department**

Institut für Technische Informatik und Mikroelektronik

**Print**