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

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