COURSE DETAIL

SPACE ROBOTICS
Country Germany
Host Institution Technical University Berlin
Program(s) Technical University Summer
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Electrical Engineering Computer Science
UCEAP Course Number 121
UCEAP Course Suffix
UCEAP Official Title SPACE ROBOTICS
UCEAP Transcript Title SPACE ROBOTICS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
In this course students acquire knowledge of the most important topics related to space robotics and planetary exploration. Course participants learn the parts of a space rover system and understand their correlations. In addition, they are able to plan and conduct a planetary exploration mission. Students are taught how to design a part of a rover system with regard to mechanics, electronics, and programming. The course starts with introductory lectures about the most important topics related to space rover technologies and planetary exploration. In parallel, a practical training is given to develop specific engineering skills in mechanics, electronics, and programming that are necessary to conduct the hands-on project. During project work units, parts of a rover are designed with supervision in smaller groups. In a mission scenario on a test-bed, the rover is operated under real conditions. The course requires no specific robotics-related knowledge. Experience in programming is an advantage.

Language(s) of Instruction
English

Host Institution Course Number

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SPACE ROBOTICS

Host Institution Course Details

Host Institution Campus
TUBS

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

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