COURSE DETAIL

HANDS-ON SATELLITE DESIGN
Country Germany
Host Institution Technical University Berlin
Program(s) Technical University Summer
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Engineering
UCEAP Course Number 102
UCEAP Course Suffix
UCEAP Official Title HANDS-ON SATELLITE DESIGN
UCEAP Transcript Title SATELLITE DESIGN
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

The course starts with introductory lectures about the most important topics related to space technologies. In parallel, practical training is given to develop specific engineering skills in mechanics, electronics, and programming that is necessary to conduct the hands-on project. A CanSat is a small satellite in shape of a commercial beverage can that performs several measuring tasks. In this course, a CanSat is designed, built and tested in the field during a rocket launch. Therefore, all basics of topics related to exciting area of space technologies is imparted and practical skills for the development of a CanSat are trained. The theoretical units are supplemented by practical exercises. During project work units, parts of a CanSat are designed with supervision in smaller groups. During a launch campaign, the CanSat is tested under real conditions.Parts of the CanSat are developed in intensely supervised small groups. The course is supplemented by an excursion to space related companies and institutions in Berlin, during which the participants gain insight into facilities used for the development of satellites. Participants should have a general understanding of engineering.

Language(s) of Instruction
English

Host Institution Course Number

Host Institution Course Title
HANDS-ON SATELLITE DESIGN

Host Institution Campus
TUBS

Host Institution Faculty

Host Institution Degree

Host Institution Department

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