

# 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

CANSAT: HANDS-ON SATELLITE DESIGN

### Host Institution Course Details

<https://www.tu.berlin/en/international/summer-school/summer-school/summer-schoo...>

### Host Institution Campus

TUBS

### Host Institution Faculty

### Host Institution Degree

**Host Institution Department**

**Course Last Reviewed**

2024-2025

[Print](#)