### Module title
Control Engineering in Space 2

### Abbreviation
10-I=CE2-182-m01

### Module coordinator
holder of the Chair of Computer Science VII

### Module offered by
Institute of Computer Science

### ECTS
5

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
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### Duration
1 semester

### Module level
graduate

### Other prerequisites
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## Contents
Students taking up this course are recommended to first complete Control Engineering in Space I. This course teaches advanced topics in control of dynamic systems specially related to space applications.

## Intended learning outcomes
The students learn all necessary basics for the understanding of dynamic systems and their controllability by Kalman filters and their use in space applications. They are introduced to advanced controller and observer methods and realize the connections between the dual pairs controllability-observability and controller- and observer design as well as the relationship between Kalman filter as a state estimator and an observer.

## Courses
(type, number of weekly contact hours, language — if other than German)

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Module taught in: English

## Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 90 to 120 minutes)

Language of assessment: English
creditable for bonus

### Allocation of places
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### Additional information
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### Referred to in LPO I
(examination regulations for teaching-degree programmes)
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### Module appears in
Master’s degree (1 major) Satellite Technology (2018)