### Module title

**Space Systems Design**

### Abbreviation

10-I=RSE-161-m01

### Module coordinator

holder of the Chair of Computer Science VIII

### Module offered by

Institute of Computer Science

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>numerical grade</td>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
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### Contents

In the course of a semester project, a spacecraft system will be designed in a team. The selection of the spacecraft system is done anew each semester and draws inspiration from current trends and concrete research, often from the area of microsatellites, like “design of a nanosatellite mission for detection and observation of transient lunar phenomenons (TLP)”.

### Intended learning outcomes

The students gain fundamental knowledge about the design of spacecraft systems. They are able to analyse the elementary design aspects, create requirements accordingly and consider them in their system design. With the help of the acquired knowledge of methods they are able to create dedicated tools and methods to support the design in the area of spacecraft systems. Also project management for the development of spacecraft systems will be trained.

### Courses

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

| R (3) |

### Method of assessment

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

project report (10 to 15 pages) and presentation of project (15 to 30 minutes)

Each project is offered one time only. The project will not be repeated; there will not be another project with the same topic. Assessment can, therefore, only be offered for the project offered in the respective semester.

Assessment offered: In the semester in which the course is offered

Language of assessment: German and/or English

### Allocation of places

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### Additional information

Focuses available for students of the Master’s programme Informatik (Computer Science, 120 ECTS credits): LR.

Referred to in LPO I (examination regulations for teaching-degree programmes)

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### Module appears in

Master’s degree (1 major) Computer Science (2016)