# Module title

**Selected Chapters of Aerospace Science and Engineering**

| Abbreviation | 10-I-AKLR-141-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

undergraduate

## Other prerequisites

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## Contents

Selected topics in aerospace engineering, for example: satellite communication, rocket science, propulsion systems, sensors and actuators for orientation control, perturbation of orbits, interplanetary orbits, rendezvous and docking, design of space ships, design of planetary bases, life support systems, special aspects of operations, payloads, optical systems, RADAR, earth monitoring, thermo management, structure of space ships, special areas of navigation, space environment, environment simulation, verification and test of space faring systems, space astronomy and planet missions, space medicine and biology, material science, quality management, space law.

## Intended learning outcomes

The students possess an advanced knowledge about the respective topic of the selected area and are able to consider these foundations in their future plans of air or spaceborne systems.

## Courses

(V + Ü (no information on SWS (weekly contact hours) and course language available)

## Method of assessment

written examination (approx. 60 to 120 minutes); if announced by the lecturer at the beginning of the course, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes)

Language of assessment: German, English

## 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

Bachelor’ degree (1 major) Aerospace Computer Science (2014)