Module title: Spacecraft System Analysis
Abbreviation: 10-I=SSA-182-m01

Module coordinator: holder of the Chair of Computer Science VII
Module offered by: Institute of Computer Science

ECTS: 10
Method of grading: numerical grade
Only after succ. compl. of module(s): --

Duration: 1 semester
Module level: graduate
Other prerequisites: --

Contents:
Spacecraft system Analysis examines the design of spacecraft and launch vehicles, including the impacts of the atmosphere and the space environment on requirements and configurations. The principles and design aspects of the structure, propulsion, power, thermal, communication, and control subsystems are studied.

Intended learning outcomes:
Students gain a general understanding of orbital mechanics & parameters and the subsystems of a spacecraft. This course handles the most important subsystems individually as listed in the table of contents. At the end of the course students will learn to translate mission requirements into orbit and subsystem definitions. Thermal and Mechanical qualification including testing for space is additionally covered.

Courses:
Type: V (4) + Ü (2) + E (2)
Module taught in: English

Method of assessment:
Type: written examination (approx. 90 to 120 minutes) and field trip report (4 to 8 pages)
Language of assessment: English
Module is creditable for bonus: English

Allocation of places:
--

Additional information:
--

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

Module appears in:
Master’s degree (1 major) Satellite Technology (2018)