Module title
Aerospace Laboratory

Abbreviation
10-I-LRLA-092-m01

Module coordinator
holder of the Chair of Computer Science VIII

Module offered by
Institute of Computer Science

ECTS
6

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
Structure and control of satellites and airplanes, control and (very little) regulation of physical/mechanical systems, sensors and actuators, energy, structure (construction) of a satellite model/simulator, construction of a ground segment for different components and systems of air and space flight, structure of simplified subsystems of air and space flight. Life cycle of a complex development consisting of software, hardware, electronics and mechanics. Selection of suitable components.

Intended learning outcomes
The students will be able to construct and integrate prototypical subsystems consisting of software, hardware, electronics and mechanics by themselves as well as to operate, test and document these. The whole life cycle of a development will be tested: capture of requirements, rudimentary design, detailed design, modelling, implementation (software, hardware, mechanics), test design, inspection, maintenance, transfer to the successor model.

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

Method of assessment
practical exercises (time to complete: approx. 6 weeks) and documentation (approx. 10 pages)

Allocation of places
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Additional information
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Referred to in LPO I
(examination regulations for teaching-degree programmes)

Module appears in
Bachelor’ degree (1 major) Aerospace Computer Science (2009)
Bachelor’ degree (1 major) Aerospace Computer Science (2011)