UNIVERSITÄT WÜRZBURG
Julius-Maximilians-

Module title	Abbreviation
Aerospace Laboratory	10-I-LRLA-172-m01

Module coordinator	Module offered by
holder of the Chair of Computer Science VIII	Institute of Computer Science

ECTS	Method of grading	Only after succ. compl. of module(s)	
6	numerical grade	--	
Duration	**Module level**	**Other prerequisites**	
1 semester	undergraduate	--	

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

V (2) + P (2)

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

Completion of approx. 6 practical exercises (approx. 4 hours each)

Allocation of places

--

Additional information

--

Workload

180 h

Teaching cycle

--

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

--

Module appears in

Bachelor's degree (1 major) Aerospace Computer Science (2017)
Module studies (Bachelor) Computer Science (2019)
Bachelor's degree (1 major) Aerospace Computer Science (2020)
Module studies (Bachelor) Aerospace Computer Science (2021)