

Module title		Abbreviation
Selected Topics in Aerospace Engineering		10-I=AKLR-232-m01
Module coordinator		Module offered by
holder of the Chair of Computer Science VII		Institute of Computer Science
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
Contents		
<p>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, aeroflight topics, avionics for airplanes, air traffic control, areal navigation, pilot interfaces, air traffic control, air traffic management.</p>		
Intended learning outcomes		
<p>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.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (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)		
<p>a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus</p>		
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.		
Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
<p>Module studies (Master) Computer Science (2019) Master's degree (1 major) Computer Science (2023) Master's degree (1 major) Aerospace Computer Science (2023)</p>		