

Module title		Abbreviation
Dynamics of aerospace systems		10-I-LRDN-092-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)
6	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).
Contents		
Foundations of orbital dynamics and orientation dynamics of air and space vehicles, spherical trigonometry, two-body problem, identification of classical orbit elements from initial conditions, identification of orbit elements through observation (Laplace method), identification of orientation data, rocket lift-off trajectory.		
Intended learning outcomes		
Understanding of fundamental methods for acquisition, processing and control of orbit and orientation systems in air and space travel. Skills to apply the acquired knowledge in development and analysis of orbit and orientation systems.		
Courses (type, number of weekly contact hours, language – if other than German)		
V + Ü (no information on SWS (weekly contact hours) and course language available)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)		
Allocation of places		
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Additional information		
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Workload		
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Teaching cycle		
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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 (2009)		
Bachelor' degree (1 major) Aerospace Computer Science (2011)		