

Module title		Abbreviation
Control Engineering in Space 2		10-I=CE2-182-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		
Students taking up this course are recommended to first complete Control Engineering in Space I. This course teaches advanced topics in control of dynamic systems specially related to space applications.		
Intended learning outcomes		
The students learn all necessary basics for the understanding of dynamic systems and their controllability by Kalman filters and their use in space applications. They are introduced to advanced controller and observer methods and realize the connections between the dual pairs controllability-observability and controller- and observer design as well as the relationship between Kalman filter as a state estimator and an observer.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (2) + Ü (2) Module taught in: English		
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. 90 to 120 minutes) Language of assessment: English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Master's degree (1 major) Satellite Technology (2018)		