

<b>Module title</b>		<b>Abbreviation</b>
Control Engineering in Space 2		10-I=CE2-182-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Computer Science VII		Institute of Computer Science
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
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.		
<b>Intended learning outcomes</b>		
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.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V (2) + Ü (2) Module taught in: English		
<b>Method of assessment</b> (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		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Satellite Technology (2018)		