

Module MA-INF 4213	Seminar Humanoid Robots				
Workload 120 h	Credit points 4 CP	Duration 1 semester	Frequency every semester		
Module coordinator	Prof. Dr. Maren Bennewitz				
Lecturer(s)	Prof. Dr. Maren Bennewitz				
Classification	Programme M. Sc. Computer Science		Mode Optional	Semester 2.	
Technical skills	Knowledge in advanced topics in the area of humanoid robotics, such as environment perception, state estimation, navigation, or motion planning. Ability to understand new research results of scientific papers and to present them in a talk as well as in a self-written summary.				
Soft skills	Self-competences (time management, literature search, self-study), communication skills (preparation of the talk, clear didactic presentation of techniques and experimental results, scientific discussion, structured writing of summary), social skills (ability to formulate and accept criticism, critical examination of algorithms and experimental results).				
Contents	Current research papers from conferences and journals in the field of humanoid robotics covering fundamental techniques and applications.				
Prerequisites	Recommended: At least 1 of the following: MA-INF 4215 – Humanoid Robotics MA-INF 4113 – Cognitive Robotics				
Format	Teaching format	Group size	h/week	Workload[h]	CP
	Seminar	10	2	30 T / 90 S	4
	T = face-to-face teaching; S = independent study				
Exam achievements	Oral presentation, written report (graded)				
Study achievements	none (not graded)				
Forms of media					
Literature	- S. Thrun, W. Burgard and D. Fox: Probabilistic Robotics. MIT Press - B. Siciliano, O. Khatib (Eds.): Springer Handbook of Robotics - K. Harada, E. Yoshida, K. Yokoi (Eds.), Motion Planning for Humanoid Robots, Springer - Selected papers.				