

Module title					Abbreviation
Performance Evaluation of Distributed Systems 10-I=LVS-232-m01					
Module coordinator				Module offered by	
holder of the Chair of Computer Scienc			e III Institute of Computer Science		
ECTS Method of grading		Only after succ. compl. of module(s)			
5 numerical grade					
Duration Module level		Module level	Other prerequisites		
1 semester		graduate			
Contents					
The performance evaluation of distributed systems is illustrated and practically performed on a contemporary ex- ample, e.g., the Internet of Things (IoT). The following topics will be conveyed: Traffic theoretic models, fundamental concepts of theory of probability, transformation techniques, stochastic processes, methods for performance analysis of technical systems, queuing and traffic theory, discrete-time and continuous Markov chains, analysis of Markov and non-Markov systems, practical examples for performance evaluation of computer systems and networks: service quality and other characteristics.					
Intended learning outcomes					
The students possess the methodic knowledge and the practical skills necessary to model technical systems by means of the theory of probability and mathematical statistics.					
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)					
If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus					
Allocation of places					
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Additional information					
Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,GE,IN					
Workload					
150 h					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
§ 22 II Nr. 3 b)					
Module appears in					
Module studies (Master) Computer Science (2019) Master's degree (1 major) Computer Science (2023) Master's degree (1 major) Aerospace Computer Science (2023)					
Master's degree (1 major) Computational Mathematics (2024)					
Master's degree (1 major) Mathematics (2024)					
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)					





Master's degree (1 major) Computer Science (2025)

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