

Module title		Abbreviation
Computer Architecture		10-I-RAK-152-m01
Module coordinator		Module offered by
Dean of Studies Informatik (Computer Science)		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	undergraduate	--
Contents		
Instruction set architectures, command processing through pipelining, statical and dynamic instruction scheduling, caches, vector processors, multi-core processors.		
Intended learning outcomes		
The students master the most important techniques to design fast computers as well as their interaction with compilers and operating systems.		
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)		
written examination (approx. 60 to 120 minutes). 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 (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 22 II Nr. 3b § 69 I Nr. 1c: Rechnerarchitektur		
Module appears in		
Bachelor' degree (1 major) Computer Science (2015) Bachelor' degree (1 major) Mathematics (2015) Bachelor' degree (1 major) Computational Mathematics (2015) Bachelor' degree (1 major) Aerospace Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015) Master's degree (1 major) Physics (2016) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Bachelor' degree (1 major) Aerospace Computer Science (2017) Bachelor' degree (1 major) Computer Science (2017) Bachelor' degree (1 major) Computer Science (2019)		

Master's degree (1 major) Physics (2020)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Physics International (2020)
Bachelor' degree (1 major) Aerospace Computer Science (2020)
Bachelor' degree (1 major) Computer Science und Sustainability (2021)
Bachelor' degree (1 major) Artificial Intelligence and Data Science (2022)
Bachelor' degree (1 major) Artificial Intelligence and Data Science (2023)
Bachelor' degree (1 major) Mathematics (2023)
Master's degree (1 major) Physics International (2024)
Bachelor' degree (1 major) Artificial Intelligence and Data Science (2024)