Module title: Computer Architecture

Abbreviation: 10-I=RAK-161-m01

Module coordinator: holder of the Chair of Computer Science V

Module offered by: Institute of Computer Science

ECTS: 5

Method of grading: numerical grade

Only after succ. compl. of module(s): --

Duration: 1 semester

Module level: undergraduate

Other prerequisites: --

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).
Separate written examination for Master’s students.
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): SE, IT, ES, LR.

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master’s degree (1 major) Computer Science (2016)
Master’s degree (1 major) Computer Science (2017)
Master’s degree (1 major) Computer Science (2018)