

Module title		Abbreviation
Digital computer systems		10-I-RALV-152-m01
Module coordinator		Module offered by
holder of the Chair of Computer Science V		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	Simultaneous completion of module 10-I-RALT is recommended.
Contents		
Introduction to digital technologies, Boolean algebras, combinatory circuits, synchronous and asynchronous circuit hardware description languages, structure of a simple processor, machine programming, memory hierarchy.		
Intended learning outcomes		
The students possess a knowledge of the fundamentals of digital technologies up to the design and programming of easy microprocessors as well as knowledge for the application of hardware description languages for the design of digital systems.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (4)		
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).		
Allocation of places		
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Additional information		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 69 I Nr. 1c: Rechnerarchitektur § 22 II Nr. 3b		
Module appears in		
First state examination for the teaching degree Gymnasium Computer Science (2015) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)		