

Module title		Abbreviation
Digital computer systems		10-I-RAL-102-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)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).
Contents		
Introduction to digital technologies, Boolean algebras, combinatory circuits, synchronous and asynchronous circuits, 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 + Ü (no information on SWS (weekly contact hours) and course language available)		
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. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.		
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 (1) 1. c) Informatik Technische Informatik		
Module appears in		
Bachelor' degree (1 major) Computer Science (2010) Bachelor' degree (1 major) Mathematics (2012) Bachelor' degree (1 major) Mathematics (2013) Bachelor' degree (1 major) Computational Mathematics (2012) Bachelor' degree (1 major) Computational Mathematics (2013) First state examination for the teaching degree Gymnasium Computer Science (2009)		