## Module title
Digital computer systems

## Abbreviation
10-I-RAL-152-m01

### Module coordinator
holder of the Chair of Computer Science V

### Module offered by
Institute of Computer Science

### ECTS
10

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
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### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
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## 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)

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<thead>
<tr>
<th>Type</th>
<th>Number of Contact Hours</th>
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## 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)
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## 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)
- Bachelor' degree (1 major) Aerospace Computer Science (2017)
- Bachelor' degree (1 major) Computer Science (2017)
- Bachelor' degree (1 major) Computer Science (2019)