

Course number: AIT 32460
Real-time Operating Systems and
Ubiquitous Computing
Study Level: Bachelor /
Undergraduate

Prof. Dr. Ralf Seepold

Language of instruction: English

**ECTS Credits: 6** 

## **Learning objectives:**

Subject-specific competencies:

- understand and apply basic concepts and algorithms of operating systems
- describe and know fundamental functions and services of operating systems
- apply shell scripts
- interpret ubiquitous computing concepts
- develop ubiquitous computing applications

## Methodological competencies:

- · decide on operating systems concepts and applications
- design ubiquitous computing applications

## Interdisciplinary competencies:

· understand fundamentals in operating system, ubiquitous computing and applications

## **Contents:**

- Resource and process management
- Memory management
- File and input/output management
- Synchronization, deadlocks
- Ubiquitous computing concepts
- AAL technologies and IoT
- Vital sign management