Module title: Software Quality  
Abbreviation: 10-MCS-SQ-152-m01

Module coordinator: holder of the Chair of Computer Science IX  
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:
The module teaches techniques and practices for creating high-quality software. Specifically, principles of typical software requirements such as reliability, testability, accuracy, security, reusability, maintainability, and efficiency in terms of runtime behavior and resource consumption are presented and discussed. Programming guidelines and source code examples are used to teach concepts, techniques and tools for creating professional quality code and high quality software products.

Intended learning outcomes:
After participating in the module courses, students will be able to recall, summarize, explain, and implement theory and methods for creating high-quality software products. Students will be able to compare, describe, and develop testing techniques and software requirements specifications.

Courses:
(type, number of weekly contact hours, language — if other than German)
V (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)  
Language of assessment: German and/or English  
 créditable for bonus

Allocation of places: --

Additional information: --

Workload:
150 h

Teaching cycle: --

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

Module appears in:
Bachelor’ degree (1 major) Human-Computer Systems (2015)  
Bachelor’ degree (1 major) Human-Computer Systems (2016)  
Bachelor’ degree (1 major) Human-Computer Systems (2018)  
Bachelor’ degree (1 major) Human-Computer Systems (2022)