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:
How do we develop high quality software? How do we write good code? This module will teach students how to recognise and write high quality software code. The module will focus on developing the skills to meet critical software quality requirements such as reliability, testability, accuracy, security, portability and maintainability as well as efficiency in time and space. Programming guidelines as well as code examples will illustrate concepts, techniques and tools that lead to professional code quality and ensure high software quality production. Different programming languages will be used to highlight typical examples and key concepts.

Intended learning outcomes:
At the end of the course, the students will have gained a solid background knowledge on the theory and the methods for producing high quality code. They will also have gained a broad understanding of 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
creditable for bonus

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) Human-Computer Systems (2015)
Bachelor’ degree (1 major) Human-Computer Systems (2016)
Bachelor’ degree (1 major) Human-Computer Systems (2018)