| Module title | | | Abbreviation |
|---|---|---|---|
| **Programming Course Interface Development** | | | 10-MCS-SPSE-152-m01 |
| **Module coordinator** | | **Module offered by** | |
| holder of the Chair of Computer Science IX | | 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 | -- | |

**Contents**

The module provides basic knowledge about the collaborative development process of software with a focus on graphical user interfaces. This includes the creation and execution of requirements analyses, the design of the software architecture, its implementation and the testing of the developed software. The necessary activities are carried out independently in groups of 4-5 students. Presentations, exercises and discussions help the student groups to improve their teamwork skills, to become familiar with the required technologies and activities, and to organize the project as a whole. The technologies used are regularly adapted and currently include Git, HTML, CSS, JavaScript, Java, the Play framework, SQL, JDBC and JUnit.

**Intended learning outcomes**

After participating in the module courses, students are able to develop software collaboratively. They can elicit, specify, analyze, and validate software requirements. Students are able to independently familiarize themselves with new software technologies and frameworks and use them to develop graphical user interfaces. In addition to these technical and methodological skills, students will be able to apply best practices for effective teamwork, such as evaluation methods, communicating expectations, and dealing with problems.

**Courses** (type, number of weekly contact hours, language — if other than German)

Ü (4)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

presentation of project results (approx. 20 minutes)
Language of assessment: German and/or English
creditable for bonus

**Allocation of places**

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**Additional information**

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**Workload**

300 h

**Teaching cycle**

Teaching cycle: only in winter semester

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

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**Module appears in**

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