

Only the german version of the module description as part of the study regulations is legally binding.

Module name	Human-computer interaction
Module number	INF-25-Ba-W-HCI
Responsible lecturer	Prof. Dr. Gerhard Weber gerhard.weber@tu-dresden.de
Qualification objectives	Students master human-centered design and, in particular, task analysis, prototyping and evaluation methods. Using Fitt's law, students are able to recognize the connection between objective measurements and model building. They can compare different software architectures, paradigms and tools for interactive systems. For the formal description of interactive systems, students are familiar with rule-based approaches, multimedia interaction techniques for pedestrian navigation using localization techniques and assistance systems in vehicles.
Content	The module covers the design and evaluation of user interfaces and includes human-centered design, evaluation methods with users and experts, empirical test setup using the example of the relationship between human hand-eye coordination, software paradigms such as model-view controllers, description procedures for interaction techniques and mobile interaction techniques.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and the self-studium. The language of instruction for the lectures and exercises is German.
Prerequisites for participation	In the Bachelor's degree program in Computer Science and in the Bachelor's degree program in Applied Computer Science, the competencies to be acquired in the module INF-25-Ba-MCI Fundamentals of Human-Computer Interaction are a prerequisite.
Applicability	In the Bachelor's degree program in Computer Science, the module is a compulsory elective module in the specialization area, which must be selected in accordance with the appendix to the examination regulations. In the Bachelor's degree course in Applied Computer Science, the module is a compulsory elective module in the specialization in Media Informatics and in the specialization in Medical Informatics, which must be selected in accordance with the annex to the examination regulations. The module creates the prerequisites for the modules listed under prerequisites for participation.
Requirements for earning credit points	The credit points are earned if the module examination is passed. The module examination consists of a non-public oral examination as an individual examination lasting 15 minutes. The examination language is German.
Credit points and grades	6 credit points can be earned through the module. The module grade corresponds to the grade of the examination.
Module frequency	The module is offered every winter semester.

Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.