

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

Module name	Digital design
Module number	INF-25-Ma-FHI-DD
Responsible lecturer or responsible lecturer	Prof. Dr. Matthew McGinity matthew.mcginity@tu-dresden.de
Qualification objectives	Students are able to analyze a real problem and design and develop a practical solution using interactive, intelligent and immersive technologies.
contents	Contents of the module are the design and development of an interactive or immersive application in a practical context, the analysis of a real problem or challenge posed by professionals from fields such as archaeology, architecture, physiotherapy or psychotherapy, museums and galleries, journalism or education, the design and development of a solution using interactive and immersive technologies, as well as the design analysis processes the development of immersive media software.
Forms of teaching and learning	The module includes internships in the scope of 4 SWS and self-study. The teaching language of the internships can be German or English and will be specified by the lecturer at the beginning of each semester and announced in the usual way.
Requirements for participation	The competencies to be acquired in the modules INF-25-Ba-MCI Fundamentals of Human-Computer Interaction, INF-25-Ba-SWT Software Technology and INF-25-Ma-FVC-FCG Foundations of Computer Graphics are assumed in the Bachelor's degree program in Computer Science and in the Bachelor's degree program in Applied Computer Science. In the computer science degree program, the competencies to be acquired in the modules INF-25-Ba-MCI Basics of Human-Computer Interaction and INF-25-Ba-SWT Software Technology are required. The Master's programme in Computer Science assumes competences in the design and implementation of user interfaces as well as knowledge of their evaluation with regard to usability and accessibility, knowledge in object-oriented software development, in the application of object-oriented modelling and programming languages, and knowledge of computer graphics at bachelor's level.
usability	The module is a compulsory elective module in the field of Human-Computer Interaction and Interactive Media in the diploma programme Computer Science in the main course of study, which must be chosen in accordance with Annex 2 to the Examination Regulations. In the Bachelor's programme in Computer Science, the module is a compulsory elective module of specialisation, which must be chosen in accordance with the annex to the examination regulations. The module in the Bachelor's programme in Applied Computer Science is a compulsory elective module in the specialisation

	<p>in Media Informatics and in the specialisation in Geoinformatics, which must be chosen in accordance with Annex 2 to the Specific Examination Regulations. The module in the Master's programme Computer Science is a compulsory elective module in the Open Track in the field of Human-Computer Interaction and Interactive Media as well as the supplement, which must be selected in accordance with Annex 2 to the examination regulations. The module can only be selected once in the Master's programme Computer Science. The module cannot be selected in the Master's program Computer Science if this or a substantially identical module from a degree program with which the admission requirements according to § 3 of the study regulations have been fulfilled, has already been completed. The module creates the prerequisites for the modules, which it names under prerequisites for participation.</p>
Conditions for awarding credits	<p>The credit points are earned when the module examination has been passed. The module exam consists of a complex performance of 80 hours. The language of the examination is German or English at the choice of the student.</p>
Credits and grades	<p>6 credit points can be earned through the module. The module grade corresponds to the grade of the examination performance.</p>
Frequency of the module	<p>The module is offered every summer semester.</p>
workload	<p>The total workload is 180 hours.</p>
Duration of the module	<p>The module covers one semester.</p>