

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

Module name	Web and multimedia engineering
Module number	INF-25-Ba-PMI-WME
Responsible lecturer	Prof. Dr. Raimund Dachzelt raimund.dachselt@tu-dresden.de
Qualification objectives	Students are familiar with methods, implementation concepts, architectural principles, description languages and development tools for the realization of multimedia, interactive web applications. They can identify suitable solutions, techniques and tools for the respective application problem and have a clear idea of the possibilities they offer and the limitations associated with them. Students have practical experience in dealing with development methods for multimedia web applications.
Content	The module covers basic principles and methods for implementing multimedia web applications. In particular, this includes the basics of the World Wide Web, protocols and interaction patterns (request/response), document description formats and data representation, client- and server-side programming, service-oriented web applications as well as multimedia web content and applications gen. Further contents are the realization techniques and the consideration of the characteristics of different target systems.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and the selfbststudium. 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 modules INF-25-Ba-AuD Algorithms and Data Structures, INF-25-Ba-Prg Programming and RoboLab, INF-25-Ba-SWT Softw are Technology and Fundamentals of INF-25-Ba-MCI Fundamentals of Human-Computer Interaction, in particular practical experience in programming, are required.
Applicability	In the Bachelor's degree program in Computer Science, the module is a compulsory elective module of the specialization, which must be selected in accordance with the annex to the examination regulations rdnung. In the Bachelor's degree course in Applied Computer Science, the module is a compulsory module in the specialization in Medical Informatics and in the specialization in Medical Informatics it is a compulsory elective module that 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 written examination lasting 90 minutes and a portfolio of 60 hours. Both examinations are relevant for passing

	the module. The examination language for the written examination and the portfolio is German.
Credit points and grades	6 credit points can be earned through the module. The module grade is calculated from the weighted average of the grades of the individual examinations. The written examination is weighted twice and the portfolio is weighted once.
Module frequency	The module is offered every winter semester.
Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.