

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

Module name	Requirements and Test Management
Module number	INF-25-Ma-FSP-RETE
Responsible lecturer	Prof. Dr. Uwe Aßmann uwe.assmann@tu-dresden.de
Qualification objectives	Students master the methods of requirements and quality management for software systems. They are able to apply advanced concepts of software engineering such as requirements and test specifications, continuous integration, modeling of software product lines in requirements analysis, quality assurance and quality management.
Content	The module covers the basics of requirements specifications, requirements management, software analysis methods, software metrics, test types, test methods and tools, modeling and validation as well as information on embedding in project management.
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 may be German or English and will be determined by the lecturer at the beginning of each semester and announced in the usual manner.
Prerequisites for participation	In the Diploma degree program in Computer Science, in the Bachelor's degree program in Computer Science and in the Bachelor's degree program in Applied Computer Science with a specialization in Media Informatics, the competencies to be acquired in the modules INF-25-Ba-SWT Software Technology, INF-25-Ba-DMF Data Management Foundations and INF-25-Ba-KI Artificial Intelligence are required. In the Bachelor's degree program in Applied Computer Science with a specialization in Medical Informatics , the competencies to be acquired in the modules INF-25-Ba-SWT Software Technology, INF-25-Ba-PMZ-DBE Database Engineering and INF-25-Ba-KI Artificial Intelligence are required.
Applicability	The module is a compulsory elective module in the subject area Software Technology and Programming Languages in the Diploma degree program in Computer Science in the main course of study, which must be selected in accordance with Annex 2 to the examination regulations. In the Bachelor's degree program in Computer Science, the module is a compulsory elective module in the subject specialization, which must be selected in accordance with the annex 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 g Medical Informatics, which must be selected in accordance with the annex to the examination regulations. In the Master's degree program in Computer Science, the module is a compulsory elective module in the Open Track in the subject area Software Technology and Programming Languages and the supplement g, which must be selected in accordance with Annex 2 to the Examination Regulations, and in the Distributed Systems Engineering Track, which

	must be selected in accordance with Annex 3 to the Examination Regulations. The module can only be selected once in the Master's degree program in Computer Science. The module cannot be selected in the Master's degree program in Computer Science if this module or a module with essentially the same content from a degree program with which the admission requirements according to Section 3 of the study regulations have already been met has already been completed. The module fulfills 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. Bonus achievement for oral examination is the solving of computer-based exercises of 15 hours and hours. The examination language may be German or English and will be specified by the lecturer at the beginning of each semester and announced in the usual manner.
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.