

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

Module name	Distributed Systems
Module number	INF-25-Ma-FSA-DS
Responsible lecturer	Dr. Thomas Springer thomas.springer@tu-dresden.de
Qualification objectives	After completing the module, students will be familiar with the requirements and basic principles relating to the design, structure and requirements of distributed systems. They will be able to analyze and evaluate distributed Ite applications. They also have a basic understanding of how to break down extensive monolithic applications into their individual parts in order to design scalable e, distributed systems.
Content	The module covers various architectures and communication mechanisms of distributed systems as well as the basics of distributed transactions, security aspects, name and directory services sten as well as current trends, standards and research topics in the context of distributed systems.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and the self bststudium. The language of instruction for the lectures and exercises is English.
Prerequisites for participation	In the Diploma degree program in Computer Science, the competencies to be acquired in the modules INF-25-Ba-Prg Programming and RoboLab, INF-25-Ba-RN Computer Networks, INF-25-Ba-SWT Software Technology and INF-25-Ba-DMF Data Management Foundations are required.
Applicability	The module is a compulsory elective module in the Diploma degree program in Computer Science in the main course in the subject area of Systems Architecture, which is to be selected in accordance with Appendix 2 to the examination regulations. In the Master's degree program in Computer Science, the module is a compulsory module in the Distributed Systems Engineering Track and a compulsory elective module in the Open Track in the subject area Systems Architecture and 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 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 the same content from a degree program in which the admission requirements according to § 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 written examination lasting 90 minutes. The examination language is English.
Credit points and	6 credit points can be earned through the module. The module grade

grades	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.