

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

Module name	Knowledge-Based Systems Lab
Module number	INF-25-Ba-P-KBS
Responsible lecturer	Prof. Dr. Markus Krötzsch markus.kroetzsch@tu-dresden.de
Qualification objectives	Students master subject-specific, methodological and interdisciplinary fundamentals of the development and analysis of knowledge-based intelligent systems. They understand relevant aspects of knowledge modeling and system architecture. They can methodically evaluate solutions and present their results accurately and correctly.
contents	Contents of the module are the research-oriented processing of a scientific topic, problem recognition and solution in the areas of knowledge-based systems, formal logic and symbolic AI. Depending on the task, they include mathematical analysis or prototypical implementation and empirical evaluation of solution approaches. The study of English-language specialist literature is also part of the module.
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	In the Bachelor's programme in Computer Science, the competencies to be acquired in the modules INF-25-Ba-AuD, INF-25-Ba-AuB, INF-25-Ba-LuK, INF-25-Ba-Ma1, INF-25-Ba-Ma2, and INF-25-Ba-Ma3 are required.
usability	The module is a compulsory elective module of the Bachelor's internship in the bachelor's degree program Computer Science, which must be chosen in accordance with the annex to the examination regulations. The module creates the prerequisites for the modules, which it provides under prerequisites for participation.
Conditions for awarding credits	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.
Credits and grades	6 credit points can be earned through the module. The module grade corresponds to the grade of the examination performance.
Frequency of the module	The module is offered every semester.
workload	The total workload is 180 hours.
Duration of the module	The module covers one semester.

