

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

Module name	Basics of logic programming
Module number	INF-25-Ba-W-ELP
Responsible lecturer	Prof. Dr. Sebastian Rudolph sebastian.rudolph@tu-dresden.de
Qualification objectives	Students have an in-depth understanding of the theoretical foundations of logic programming as well as in-depth knowledge of a logic programming language and the ability to systematically design logic programs and model application problems. They have knowledge of the areas of application of logic programs and an understanding of the execution of logic programs.
Content	Contents of the module are syntax, semantics and computational aspects of logic programs of different expressive power, modeling of problems with logic programming as well as practical use of logic and constraint programming.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and the self-study. 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 competences to be acquired in the modules INF-25-Ba-LuK Logic and Complexity, INF-25-Ba-Ma1 Linear Algebra and Analysis, INF-25-Ba-Ma2 Discrete Structures, INF-25-Ba-Ma3 Algebra and INF-25-Ba-Ma4 Probability Theory and Statistics, in particular the basics of Theoretical Computer Science and Propositional and Predicate Logic as well as knowledge of Mathematics, are required.
Applicability	In the Bachelor's degree program in Computer Science, the module is a compulsory elective module in the specialization area, which must be selected in accordance with the appendix to the examination regulations. In the Bachelor's degree program in Applied Computer Science, the module is a compulsory elective module in the specialization in Media Informatics and in the specialization in Medical Informatics, which must be selected in accordance with the appendix 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 non-public oral examination as an individual examination lasting 25 minutes. The examination language is German.
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.