

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

Module name	Programming and RoboLab
Module number	INF-25-Ba-Prg
Responsible lecturer	Prof. Dr. Christof Fetzer christof.fetzer@tu-dresden.de
Qualification objectives	Students are familiar with the structure and functionality of programming languages n, have knowledge of programming and can apply this knowledge in practice. They are able to solve problems independently, independently learn other programming languages n and transfer their skills to them. This enables them to analyze and evaluate programming languages in order to select the appropriate language for solving various problems en. Students acquire skills in solving complex tasks within a team.
Content	Contents of the module are the use and development of formal tools, the basics of calculation, translation of program constructors, program transformations and the verification of program properties.
Teaching and learning methods	The module comprises lectures of 2 SWS , exercises of 2 SWS, practicals of 4 SWS and self-study. The language of instruction for the lectures, exercises and practicals is German.
Prerequisites for participation	Knowledge of mathematics at A-level is required.
Applicability	The module is a compulsory module in the Diploma degree course in Computer Science in the foundation ium. The module is a compulsory module in the Bachelor's degree course in Computer Science and in the Bachelor's degree course in Applied Computer Science . 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 d a complex assignment lasting 80 hours. Both examinations are relevant for passing the module. Bo nusleistung zur Klausurarbeit ist das Lösen von Übungsaufgaben im Umfang von 15 Stunden. The examination language for the written examination and the complex assignment is German.
Credit points and grades	The module can be used to acquire 9 credit points . The module grade is calculated from the unweighted average of the grades of the individual examinations.
Module frequency	The module is offered every winter semester at .
Workload	The total workload is 270 hours.

Module duration	The module comprises one S emester.
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