

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

Module name	Systems Programming Lab
Module number	INF-25-Ba-P-SP
Senior Lecturer	Prof. Dr.-Ing. Horst Schirmeier os@mailbox.tu-dresden.de
Qualification objectives	Students master tools and coding techniques for system-level programming under Unix/Linux. They can assess, select and operationalise them for use in complex application scenarios.
Contents	The module covers the handling of tools for creating and debunking programmes under Unix-based operating systems, the deepening of knowledge of programming in modern system-level programming languages such as C/C++ and Rust, system-level programming at Assembler level, the design and implementation of multi-stage programmes, and the use of English-language interface documentation.
Forms of teaching and learning	The module includes 4 SWS traineeships and self-study. Traineeships shall be conducted in English.
Eligibility for participation	The computer science bachelor's programme requires the skills to be acquired in the modules INF-25-Ba-BS Operating Systems, INF-25-Ba-RA Computer Architecture and Hardware Lab, and INF-25-Ba-Prg Programming and RoboLab.
Usability	In the Bachelor's Informatics course, the module is a compulsory voting module for the Bachelor's Traineeship, to be selected in accordance with the annex to the exam rules. The module provides the pre-requisites for the modules it designates under the pre-requisites for participation.
Conditions for the award of credits	Credits are awarded when the module test is passed. The module test consists of a complex performance of 80 hours. The language of the exam will be German or English, at the student's choice.
Credits and marks	The module allows 6 credit points to be obtained. The module score corresponds to the test performance score.
Frequency of the module	The module is offered every winter semester.
Workload	The total workload is 180 hours.
Duration of the module	The module includes a semester.