

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

Module name	Systems Security Lab
Module number	INF-25-Ma-FSC-SSL
Responsible lecturer	Prof. Dr. Florian Tschorsch florian.tschorsch@tu-dresden.de
Qualification objectives	Students are familiar with practical IT security methods and techniques. They have knowledge of methods and procedures from the field of penetration tests to evaluate the security of an IT system.
Content	The module covers methods and procedures in the field of penetration testing, legal and organizational backgrounds and framework conditions, a methodology for carrying out penetration tests, the theoretical background of vulnerabilities and procedures for finding them using the example of various application areas or system reports eichen, procedures from the field of computer forensics, for the analysis of successful attacks and practical penetration test attempts.
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 German.
Prerequisites for participation	No knowledge is 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 Secure Computing, which must be selected in accordance with Annex 2 to the examination regulations. In the Master's degree program in Computer Science, the module is a compulsory elective module in the op en track in the subject area of Secure Computing and the supplement, which must be selected in accordance with Annex 2 to the examination regulations. The module can only be chosen 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 essentially the same content from a degree program in which the admission requirements were fulfilled in accordance with Section 3 of the study regulations has already been completed. 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 may be German or English and will be specified by the lecturer at the beginning of each semester and announced in the usual manner.
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 summer semester.
Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.