

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

Module name	Security in Applications
Module number	INF-25-Ma-FSC-ASec
Responsible lecturer	Dr. Stefan Köpsell stefan.koepsell@tu-dresden.de
Qualification objectives	Students master methods and techniques for developing secure applications with a particular focus on practical aspects.
Content	The module covers methods, techniques, and process models in the field of developing and operating secure and privacy-friendly applications with a strong practical focus, digital identities, including self-sovereign identities, confidential computing, certification, threat modeling, risk assessment, the development cycle for secure software development, as well as DevSecOps and security in the field of operational technology (OT).
Teaching and learning methods	The module comprises lectures of 2 SWS and self-study. The language of instruction is German.
Prerequisites for participation	The diploma program in computer science requires students to have acquired the skills taught in the INF-25-Ba-Si Security module. The master's program in computer science requires students to have bachelor's-level skills in IT security.
Applicability	The module is a compulsory elective module in the field of secure computing in the main study period of the computer science degree program, which must be selected in accordance with Appendix 2 of the examination regulations. The module is a compulsory elective module in the OpenTrack in the field of Secure Computing and the supplement in the Master's program in Computer Science, which must be selected in accordance with Appendix 2 of the examination regulations. The module establishes the prerequisites for the modules that are specified 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 20 minutes. The examination language is German.
Credit points and grades	3 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 90 hours.
Module duration	The module comprises one semester.