

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

Module name	Privacy-Enhancing Technologies
Module number	INF-25-Ma-FSC-PET
Responsible lecturer	Prof. Dr. Florian Tschorsch florian.tschorsch@tu-dresden.de
Qualification objectives	Students are familiar with methods and techniques from the field of privacy-enhancing technologies. They are familiar with data protection risks and measures and are able to use, develop and evaluate data protection-promoting technologies.
Content	The module covers data protection risks, technologies that promote data protection to overcome these risks, models and evaluation metrics on which the design of data protection technologies is based on, in particular procedures for anonymous and unobservable communication in computer networks, anonymity and pseudonymity on the network layer and the application layer. Further content includes procedures for anonymizing and pseudonymizing data as well as data protection-compliant processing based on security protocols in general and cryptographic procedures in particular.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and the selfbststudium. The language of instruction for the lectures and exercises is English.
Prerequisites for participation	In the Diploma program in Computer Science, the competencies to be acquired in the modules INF-25-Ba-Si Security are required. In the Master's degree course in Computer Science, competencies in cryptography at Bachelor level are 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 open 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 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 with which the admission requirements according to § 3 of the study regulations have already been met 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.