

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

Module name	Geoinformatics basics
Module number	INF-25-Ma-NGR-GEO
Responsible lecturer	Prof. Dr. Lars Bernard lars.bernard@tu-dresden.de
Qualification objectives	Students master the basic application strategies of geoinformatics. They have a basic command of the essential tools of geoinformatics, in particular the application of geoinformation systems.
Content	Contents of the module are mathematical and computer science basics of geoinformatics, basics of geodata modeling and geodata analysis, basics of geodatabase and geoinformation systems, outlook on current research fields of geoinformatics as well as practical deepening using simple geoinformatics application examples.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and self-study. The language of instruction for the lectures and exercises is German.
Prerequisites for participation	No knowledge is required.
Applicability	The module is a compulsory module of the non-computer science supplement Geoinformatics in the Diploma degree program in Computer Science. In the Master's degree program in Computer Science, the module is a compulsory elective module of the supplement in the Open Track, which must be selected in accordance with Annex 2 to the examination regulations. The module can only be selected in the Master's degree program in Computer Science in combination with the module INF-25-Ma-NVE-GEO Geoinformatics Specialization. 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 written examination lasting 90 minutes and an ungraded portfolio of 30 hours. The examination language for the written examination and the portfolio is German.
Credit points and grades	6 credit points can be acquired through the module. The module grade is calculated from the weighted average of the grades of the individual examinations in accordance with Section 15 (1) sentence 6 of the examination regulations. The written examination is weighted twice and the portfolio is weighted once.

Module frequency	The module is offered every winter semester.
Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.