

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

Module name	Mathematics specialization
Module number	INF-25-Ma-NVE-MAT
Responsible lecturer	Prof. Dr. Manuel Bodirsky manuel.bodirsky@tu-dresden.de
Qualification objectives	Students have in-depth knowledge in the field of linear algebra, can apply proof techniques confidently, use mathematical terminology appropriately and have well-developed skills in mathematical abstraction.
Content	Contents of the module are duality, unitary spaces, normal forms of matrices and classification problems of linear algebra as well as aspects of analytical geometry.
Teaching and learning methods	The module comprises lectures of 4 SWS, exercises of 2 SWS and self-study. The language of instruction for lectures and exercises is German.
Prerequisites for participation	In the Diploma degree program in Computer Science and in the Master's degree program in Computer Science, the competences to be acquired in the module INF- 25-Ma-NGR-MAT Mathematics Fundamentals are a prerequisite.
Applicability	The module is a compulsory module of the Non-Computer Science Supplement Mathematics in the Diploma program in Computer Science. In the Master's degree program in Computer Science, the module is a compulsory elective module of the open track supplement, 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 Computer Science in combination with the module INF-25-Ma-NGR-MAT Mathematics Fundamentals. 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 according to Section 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. The examination language is German.
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 ten.
Workload	The total workload is 180 hours and hours.
Module duration	The module comprises one semester.