Module name	**Computational Mathematics Research Work**
Module number	CMS-TRK-PRO-CMA
Senior Lecturer	Prof. Dr. Axel Voigt axel.voigt@tu-dresden.de
Qualification objectives	Students master the self-management of a project with tasks from mathematics applications in other fields, the study and improvement of algorithms, and the generalisation or specialisation of mathematical results. Students are able to work in a project group, discuss possible ways and solutions and define sub-steps to fulfil the task, acquire the necessary detailed theoretical knowledge and computing tools, contribute to the project with their respective strengths and use the limited time resources efficiently.
Contents	The content of the module is the study and improvement of algorithms and the generalisation or specialisation of mathematical results, as well as the multidisciplinary application and communication of mathematical solutions.
Forms of teaching and learning	The module includes seminars of 2 SWS, projects of 2 SWS and self-study. The teaching language of the seminars and projects may be German or English and will be specifically determined by the teacher at the beginning of each semester and announced in the usual manner.
Eligibility for participation	No knowledge is required.
Usability	In the Master's Course Computational Modeling and Simulation, the module is a compulsory module in the Track Computational Mathematics. The module provides the pre-requisites for the modules it designates under the pre-requisites for participation.
Conditions for the award of credits	Credits are awarded when the module test is passed. The module test consists of a non-public oral test performance as an individual test lasting 20 minutes. The language of the test will be English.
Credits and marks	The module allows 5 credit points to be obtained. The module score corresponds to the test performance score.
Frequency of the module	The module is offered every winter semester.
Workload	The total workload is 150 hours.
Duration of the module	The module covers 1 semester.