Module name	**Literature Studies in combinatorial Image Analysis**
Module number	CMS-SEM-CIA
Senior Lecturer	Prof. Dr. Bjoern Andres bjoern.andres@tu-dresden.de
Qualification objectives	Students can independently explore scientific questions in the field of combinatorial optimisation for image analysis, select suitable methods from the literature and critically evaluate their application. You can understand this knowledge, present it scientifically in English and respond to queries.
Contents	The content of the module is a combinatorial problem or procedure with image analysis applications, at the student's choice.
Forms of teaching and learning	The module includes seminars of 2 SWS and self-study. The language of the seminars will be English.
Eligibility for participation	Knowledge of linear and combinatorial optimisation at bachelor's level is required. The following literature is suitable for preparation: Introduction to Linear Optimisation. Dimitris Bertsimas, John N. Tsitsiklis. Athena Scientific, 1996. ISBN 978-1-886 52919-9.
Usability	In the Masters Course Computational Modeling and Simulation, the module is a compulsory optional module of basic scientific methodological training, to be chosen in accordance with Annex 1 to the Specific Examination Regulations. The module cannot be chosen in the Master's Course Computational Modeling and Simulation if this or a module with substantially the same content from a Course with which the entry conditions under § 3 of the Studienordnung have been met has already been completed. 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 complex performance of 50 hours. The language of the test will be English.
Credits and marks	The module allows for 3 credit points. The module score corresponds to the test performance score.
Frequency of the module	The module is offered every summer semester.
Workload	The total workload is 90 hours.
Duration of the module	The module covers 1 semester.