Module number	Module name	Module coordinator
BIW-MA-AC-O-07	Applications of Computational Engineering Methods	Prof. Dr. Michael Kaliske statik@mailbox.tu-dresden.de
Learning goals	The students know the application of computer-aided modelling for structural analysis in general and structural detailing in particular. They are ready to deepen their field-specific knowledge and capabilities in a chosen area and are capable of formulating scientific inquiries.	
Content	Contents of the module are current topics relevant to application and research in civil engineering, material science, and computer-oriented mechanics.	
Teaching and learning methods	4 credit hours lecture, self-study	
Prerequisites	Prerequisites include knowledge in the areas of algebra and calculus, numerical procedures, model forming and solution procedures in the fields of solid body, fluid, and fracture mechanics, and a bachelor level understanding of research methods specific to civil engineering.	
Applicability	The module is compulsory for the Masters program Advanced Computational and Civil Engineering Structural Studies – ACCESS.	
Requirements for earning credit points	The credit points are earned upon passing the module examination. The module examination consists of a test lasting 120 minutes. The language of the examination is English.	
Credit points and grades	Five credit points can be acquired through the module. The module grade corresponds to the grade of the examination.	
Module frequency	The module is offered every winter semester.	
Workload	The workload is 150 hours.	
Module duration	1 semester	