

Module number	Module name	Module coordinator
BIW-MA-AC-O-08	ACCESS Application-Based Science Project	Prof. Dr. Michael Kaliske statik@mailbox.tu-dresden.de
Learning goals	The students are able to apply their acquired knowledge, abilities and scientific method and work skills independently or in a team to a concrete task formulation, are able to clearly document their work progress and know the rules for good scientific practice. They can develop concepts for the production of project results and present the results to an audience through a discussion. The students are strengthened in their personality development; their social commitment is empowered along with their understanding of the importance of these attributes. The students are reinforced in their abilities through group work, task organization, research, the preparation and presentation of results, the critical discussion of such results and their communicative and social skills through team work. They are equipped to appropriately present and discuss results in word and writing.	
Content	Contents of the module are concrete task formulations from civil engineering, material science and computational mechanics, especially tasks which require interdisciplinary solution approaches. The task formulations can focus either on research or on application. Further contents include scientific writing, the preparation of presentations and carrying out critical discussions.	
Teaching and learning methods	2 SWS Seminar, self-study.	
Prerequisites	Knowledge and technical applications of scientific fields in civil engineering chosen by the students as well as study and methodical competence skills obtained in the mentoring program are requirements.	
Applicability	The module is a required module in the master studies Advanced Computational and Civil Engineering Structural Studies – ACCESS.	
Requirements for earning credit points	The credit points are obtained if the module exam is passed. The module exam consists of a complex task with a duration of 300 hours. English is the examination language.	
Credit points and grades	Fifteen credit points can be obtained from the module. The module grade corresponds to the grade of the exam.	
Module frequency	The module is offered every winter semester.	
Workload	The workload consists of a total of 450 hours.	
Module duration	The duration of the module is one semester.	