Module number	Module name	Module coordinator
BIW-MA-AC-E-05	Structural Use of Glass	Dr. Michael Engelmann bauko@mailbox.tu-dresden.de
Learning goals	The students know basic concepts in the field of glass structures and are able to apply glass as a building material in the field of structural glass and façades through design and construction detailing. They know the safety concepts and can carry out calculation procedures and modeling within the given framework of the building standards. In this way, they can analyse complex problems on the subject, evaluate and compare design options and assess consequences.	
Content	Contents of the module are aspects of glass and façade engineering, including mechanical and physical basics of processed and non-processed glass, safety concepts in glass construction, designing and building with glass, analytical description of glass as a building material, analytical description of mechanically joined and bonded connections as well as all-glass structures, calculation methods and modeling.	
Teaching and learning methods	2 SWS lectures, 1 SWS exercise, self-study.	
Prerequisites	Knowledge in the field of structural design including the load assumptions obtained at bachelor level is assumed.	
Applicability	The module is one of twelve compulsory elective modules in the Master's program Advanced Computational and Civil Engineering Structural Studies - ACCESS, five of which must be chosen.	
Requirements for earning credit points	The credits are acquired if the module examination is passed. The module examination consists of a 90-minute written examination. The examination language is English.	
Credit points and grades	Five credits can be acquired through the module. The module grade corresponds to the grade of the examination performance.	
Module frequency	The module is offered every summer semester.	
Workload	The total workload is 150 hours.	
Module duration	The module covers one semester.	
Recommended reading list	Belis, Louter, Nielsen, Schneider: Architectural Glass: Chapter in Springer Handbook of Glass, J.D. Musgraves, J. Hu, L. Calvez (Eds.), Springer Nature Switzerland AG 2019, 2019.	