Study Regulations - Supplement 1 Master's degree programme "Natural Hazards and Risks in Structural Engineering"				1st semester (winter semester)	2nd semester (summer semester)	3rd semester (winter semester)	4th semester (summer semester)
Modules		Credits		Credits	Credits	Credits	Credits
Applied mathematics and stochastics for risk assessment	**Prof Rüffer,** Prof Lahmer	6		**6**			
Geographical Information Systems (GIS) and building stock survey	**Prof Rodehorst,** Dr Beinersdorf	6		**6**			
Primary hazards and risks Part I: Seismic monitoring + Regional ground motion Part II: Wind engineering	**Dr Schwarz,** Prof Morgenthal, Prof Athanasiou	6		**6**			
Finite element methods and structural dynamics Part I: Finite element methods Part II: Structural dynamics	**Prof Kollmannsberger,** Dr Most	6		**6**			
Structural engineering Part I: Reinforced and post-tensioned concrete structures Part II: Steel structures	**Prof Kraus,** Prof Morgenthal	6		**3**	**3**		
Elective module ** (recommendation: German language)		**6**		**3**		**3**	
Structural parameter survey and evaluation	**Prof Morgenthal,** Prof Rodehorst, Prof Rüffer	6			**6**		
Earthquake engineering and structural design	**Prof Abrahamczyk**	6			**6**		
Geo- and hydrotechnical engineering Part I: Geotechnical Engineering Part II: Flood Hazard and Vulnerability Assessment	**Prof Staubach**, Dr Maiwald	6			**6**		
Multi-hazard and risk assessment	**Prof Athanasiou**, Dr Beinersdorf, Dr Maiwald	6			**2**	**4**	
Elective compulsory module *		6			**6**		
Disaster management and mitigation strategies	**Prof Melzner**	6			**2**	**4**	
Life-lines engineering	**Prof Morgenthal**	6				**6**	
Elective compulsory module *		6				**6**	
Special project		6				**6**	
Elective module **		6					**6**
Master's Thesis		24	18 weeks				**24**
Total		120		30	31	29	30

* see NHRE module catalogue (updated annually, to be confirmed by the head of the NHRE program and the examination committee)
** see NHRE module catalogue - additionally any master course at the Bauhaus-Universität (German language courses for 6 credits are valid too)