Module code (1.)	Module description (2.)		Category (3.)
MBI 2520 Stand: 07.10.2021	1Ground Improvement and Piling		Int. Master
	Degree program (4.)	Sustainable Engineering of Infrastructure	
	Faculty (5.)	Civil Engineering and Conservation / Restoration	

Module supervisor	(6.)	Prof. Dr.-Ing. Wolfgang Wehr
Type of module	(7.)	P (obligatory)
Frequency	(8.)	Annually
Standard semester of study	(9.)	2nd semester
Credits (ECTS)	(10.)	5 ETCS
Assessment	(11.)	Colloquium
Language of instruction	(12.)	English
Admission requirements	(13.)	-
Module is a requirement for	(14.)	-
Module duration	(15.)	1 semester
Mandatory registration	(16.)	No
Applicability of module	(17.)	Civil Engineering

Course (18.)		Lecturer (19.)	Type (20.)	No. of students (max.) (21.)	No. of courses per week (22.)	Contact hours per week (23.)	Workload	
							Face-to-face (24.)	Self-study (25.)
1	Ground Improvement and Piling	Prof. Dr. Wehr	Lecture	25	1	2	30	30
2	Ground Improvement and Piling	Prof. Dr. Wehr	Tutorial	25	1	2	30	60
					Total	**4**	**60**	**90**
					Workload for the module (26.)			**150**

Learning objectives	(27.)	Theory and practice of all ground improvement and piling techniques.
Course contents	(28.)	Ground improvement techniques – execution and design • vertical drains • vibro compaction • vibro stone columns, vibro concrete columns • deep mixing • jet grouting • rigid inclusions • bored piles • driven piles • micropiles

Preliminary requirements and assessment (29.)	• The module is assessed by means of an oral examination in the form of a colloquium
Literature (30.)	• Handbuch Geotechnik (Boley) • Ground improvement (Kirsch)