Department	02 Civil Engineering
Course title	**Foundation Engineering**
Course number	
Hours per week (SWS)	4
Number of ECTS credits	5
Course objective	Competency based learning objectives:

Expertise: After attending this module, the students have extended and deepeend their knowledge of foundation engineering and practised their application on selected examples from professional practice. The contents, which are partly learned in the form of a group work, are to be presented to all participants.

Methodological competence: The students are able to name the appropriate production methods in special civil engineering, to apply them in a targeted manner and possibly optimise them. They are also to verify the correctness of the solutions they have developed and to document the results of their work in a comprehensible way so that they can be used by others.

Social competence: The students are able to present the results of their work in a target group oriented and comprehensible manner. They can work together in teams to solve problems and discuss problems with the teacher.

Self-competence: The students are enabled to independently develop geotechnical facts and to apply the resulting, possible consequences for special foundation engineering methods.

Prerequisites	Module 105 and 106: Soilmechanics with placement, foundation ground engineering
Recommended reading	NN
Teaching methods	Lectures, tutorials
Assessment methods	Examination in written form
Language of instruction	English
Name of lecturer	Prof. Dr. Cezary Slominski
Email	cezary.slominski@hm.edu
Course content	The students are to deepen their knowledge of sophisticated construction methods in foundation engineering: * Pile construction methods * Pile foundation properties * Pile bearing capacity calculation * Anchoring systems, fabrication * Anchoring systems, fabrication * Nailed retaining structures and slopes * Sealing walls * Laboratory tests: suspensions and sealing wall compounds * Ground improvement methods * Selected chapters and current projects
Remarks	