MODULE DESCRIPTION

Last up-date: 20.02.2006

Abbr.	Description	Lecturer
MA_W9	**Structural Mechanics**	**Zhang**

Position in the study progress, time extent, credit points

4 SWH, 6 CP

Applicability, module type, offer frequency

Master of Science, optional obligatory module, yearly offer

Admission requirements for examination

Approved home works

Achievement and examination forms, requirements, work expenditure, credit points

Form of achievement	Requirements	Work expenditure	CP	Mark weights
Presence, self-study		130 h		
Elaborations	Approved home works	50 h	-	-
Examination	Examination (3 h)		6	100 %
	Sum	**180 h**	**6**	**100 %**

Which technical, methodical and practical contents will be conveyed?

- Beams on elastic foundation
- Geometrically nonlinear problems (stability problems, theory II. order)
- Physically nonlinear problems (plastic hinge method, ultimate load method)
- Introduction into the Finite Element Method (FEM)

Which technical/methodical competence and key qualifications should be gained?

This course deals with extended and specialized subjects in structural mechanics, especially beams on elastic foundation, geometrically and physically nonlinear problems. In addition, fundamental knowledge on computer-oriented numerical methods, especially the Finite Element Method (FEM) will be conveyed.