

## MODULE DESCRIPTION

<b>Abbr.</b>	<b>Description</b>	<b>Lecturer</b>			
<b>BA_F1</b>	<b>Structural Mechanics I</b>	<b>Zhang</b>			
<b>Position in the study progress, time extent, credit points</b>		<b>Module responsible</b>			
3. Semester, 4 SWH, 5 CP		Zhang			
<b>Applicability, offer frequency</b>					
Study program:	Bachelor	Module type:	Obligatory	Offer:	Yearly
<b>Admission requirements for examination</b>					
Successful final examination of the 1. study period. Approved home works.					
<b>Achievement and examination forms, requirements, work expenditure, credit points</b>					
Form of achievement	Requirements	Work expenditure	CP	Mark weights	
Presence, self-study Home works	Written elaborations. Approved home works.	105 h			
		45 h			
Examination	Examination, duration 2h			100 %	
<b>Sum</b>		<b>150 h</b>	<b>5</b>	<b>100 %</b>	
<b>Which technical, methodical and practical contents will be conveyed?</b>					
<ul style="list-style-type: none"> <li>• Introduction of the theory of structural mechanics for bar and rod structures</li> <li>• Internal forces/moments and deformations of statically determinate systems</li> <li>• Internal forces/moments and deformations of statically indeterminate systems</li> <li>• The flexibility matrix method (force method)</li> <li>• The stiffness matrix method (displacement method)</li> </ul>					
<b>Which technical/methodical competence and key qualifications should be gained?</b>					
<p>In this course, fundamentals of the theory of structural mechanics of bar and rod structures are dealt with. The students should learn several methods for the determination of the internal forces/moments and deformations in plane and spatial structures subjected to different loading types.</p>					