MODULE DESCRIPTION

Abbr.	Description	Lecturer
BA_G4	**Engineering Mechanics II**	**Zhang**

Position in the study progress, time extent, credit points	Module responsible
2. Semester, 4 SWH, 5 CP	Zhang

Applicability, offer frequency

Study program:	Bachelor	Module type:	Obligatory	Offer:	Yearly

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		105 h		
Home works	Written elaborations. Approved home works.	45 h		
Examination	Examination, duration 2h			100 %
	Sum	**150 h**	**5**	**100 %**

Which technical, methodical and practical contents will be conveyed?

- Introduction into elastostatics
- Bars and rods under tension and pressure
- Moments of plane area
- Bending of slender prismatic beams
- Shear stress, shear flow and shear center
- Torsion of prismatic bars and rods
- Principle of work and energy, principle of virtual displacements, principle of virtual forces
- Stability of rigid and elastic bodies
- Stress state and deformation state
- Hooke's elasticity law

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

In EM II, basic knowledge and methods in elastostatics are conveyed. The students should learn some fundamentals on stresses and strains, Hooke's elasticity law, principle of work and energy, principle of virtual displacements, principle of virtual forces, and the stability problems of rigid and elastic bodies.