Name of the subject: **Mechanics I. (Statics)**	*NEPTUN-code:* *BGBMN1ENND* *BGBME1ANND* *BBXMNE1BNE*	Credits: 4 ECTS: 5
Subject leader: Dr. Tibor Goda	*Title:* ass. prof.	
Course description:		
The aim of this subject is to introduce the principles of statics and their practical application. To reach this the subject is divided into themes as follows: fundamentals of vector and matrix algebra, principles and fundamental laws of statics, description of forces, ideal supports, systems of forces in 2-D and 3-D, distributed forces, equilibrium of rigid structures, internal forces (axial force, shear force, bending moment), cantilever beams, two-supported beams, statically determinate multi-supported beams, pin-jointed trusses and frames, friction related problems, gravitational load, centre of gravity, second moment of area, Mohr's circle of second moment of area, parallel axis theorem.		