Name of the subject: **Mechanics III**	*NEPTUN-code:* *BGBMN3KTNC* *BGBMN3ENND*	Credits: 6 ECTS: 7
Subject leader: Dr. Tibor Goda	*Title:* ass. prof.	
Course description:		
The aim of this subject is to introduce the principles of both kinematics and dynamics and their practical application. To reach this goal, the subject deals with the themes as follows: fundamental conceptions of kinematics and kinetics, velocity and acceleration, throwing, circular motion, harmonic vibration and kinematics of rigid bodies. Other main guidelines are the following: state of velocity, state of acceleration, plane kinematics of rigid bodies, relative motion, kinematics of simple plane mechanisms, kinetics of a particle, Newton's laws, momentum principles and kinetic energy. The students will also acquire the knowledge of work and power theorems, constrained motion of a particle, undamped and damped vibration, plane kinetics of rigid bodies, mass moment of inertia, parallel axis theorem and fundamental conception of dynamics.		