

Information sheet for the course
Seminar on fundamentals of engineering mechanics

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of special technology</i>					
Course unit code: <i>SaOA/B/4-24/d</i>			Course unit title: <i>Seminar on fundamentals of engineering mechanics</i>		
Type of course unit: <i>optional</i>					
Planned types, learning activities and teaching methods: <i>Tutorial 2 hour weekly (on-site method)</i>					
Number of credits: <i>1</i>					
Recommended semester: <i>2nd semester in the 1st year (full-time)</i> <i>2nd semester in the 1st year (part-time)</i>					
Degree of study: <i>I. (bachelor)</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>Final score - credit: 100% active participation in the exercises, demonstrate basic knowledge in the course of the semester, timely transferred solved semester homework.</i>					
Learning outcomes of the course unit: <i>The student can analyze factual knowledge, principles and processes, general concepts in broad contexts in engineering mechanics and is designed especially for non-technical secondary school graduates. It deals with the fundamentals of statics and kinematics.</i>					
Course contents: <i>The seminar of statics and kinematics rehearse listeners calculation: balance beam, a three-member system of bodies, the four forces in the plane of the body. Center of gravity, trusses, brakes, and equilibrium reaction force in the mechanism. Relative curvilinear motion of a particle, sliding, rotating movement of the body. Geometric kinematics of the mechanism. Analytical vector method, the Coriolis decomposition. The basic decomposition. Calculation examples as necessary.</i>					
Recommended of required reading: <i>ŽIARAN, S.: Technická mechanika Statika, STU Bratislava 2003.</i> <i>JANČINA, J.- Pekárek, F.: Kinematika, Bratislava, Alfa 1987.</i> <i>BRÁT, V.: Příručka kinematiky s příklady, Praha, SNTL – Alfa 1976.</i> <i>DUHÁR, A.- REHUŠ, M.: Příklady z kinematiky, návody na cvičenia, Bratislava, Alfa 1988.</i>					
Language: <i>Slovak</i>					
Remarks: <i>Subject is provided in the summer semester of the first year of full-time study. Selective subject.</i>					
Evaluation history <i>Total number of students being evaluated: 90</i>					
A	B	C	D	E	FX
20.13	15.12	1.48	15.34	32.93	0
Lecturers: <i>Ing. Lenka Bartošová, PhD.- tutorial lecturer</i>					
Last modification: <i>15.4.2014</i>					
Supervisor: <i>prof. Ing. Alexej Chovanec, CSc., guarantee of the study program “Vehicles Maintenance and Repair”.</i>					