

**Information sheet for the course  
Seminar on fundamentals of engineering mechanics**

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>					
<b>Faculty:</b> <i>Faculty of special technology</i>					
<b>Course unit code:</b> <i>MŠT/B/4-24/d</i>			<b>Course unit title:</b> <i>Seminar on fundamentals of engineering mechanics</i>		
<b>Type of course unit:</b> <i>optional</i>					
<b>Planned types, learning activities and teaching methods:</b> <i>Tutorial 2 hour weekly, face to face method</i>					
<b>Number of credits:</b> <i>1</i>					
<b>Recommended semester:</b> <i>2<sup>st</sup> semester in the 1<sup>st</sup> year (full-time) 3<sup>rd</sup> semester in the 2<sup>nd</sup> year (part-time)</i>					
<b>Degree of study:</b> <i>I. (bachelor)</i>					
<b>Course prerequisites:</b> <i>none</i>					
<b>Assessment methods:</b> <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>					
<b>Learning outcomes of the course unit:</b> <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>					
<b>Course contents:</b> <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>					
<b>Recommended of required reading:</b> <i>ŽIARAN, S.: Technická mechanika Statika, STU Bratislava 2003. JANČINA, J.- Pekárek, F.: Kinematika, Bratislava, Alfa 1987. BRÁT, V.: Příručka kinematiky s příklady, Praha, SNTL - Alfa 1976. DUHÁR, A.- REHUŠ, M.: Příklady z kinematiky, návody na cvičenia, Bratislava, Alfa 1988.</i>					
<b>Language:</b> <i>Slovak</i>					
<b>Remarks:</b>					
<b>Evaluation history</b> <i>Total number of students being evaluated: 20</i>					
A	B	C	D	E	FX
20.13	15.1	16.48	15.34	32.93	0
<b>Lecturers:</b> <i>Ing. Lenka Bartošová, PhD.</i>					
<b>Last modification:</b> <i>15.4.2014</i>					
<b>Supervisor:</b> <i>Assoc. prof. Ing. Peter Lipták, CSc., guarantee of the study program "Mechanisms in Special Technology".</i>					