

**Information sheet for the course  
Selected Chapters from Engineering Materials**

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>	
<b>Faculty:</b> <i>Faculty of Industrial Technologies in Púchov</i>	
<b>Course unit code:</b> <i>MI-I-PV-25</i>	<b>Course unit title:</b> <i>Selected Chapters from Engineering Materials</i>
<b>Type of course unit:</b> <i>optional</i>	
<b>Planned types, learning activities and teaching methods:</b> <i>Subject of state examination / face-to-face</i>	
<b>Number of credits:</b> <i>2</i>	
<b>Recommended semester:</b> <i>4<sup>th</sup> semester in the 2<sup>nd</sup> year full-time 6<sup>th</sup> semester in the 3<sup>rd</sup> year part-time</i>	
<b>Degree of study:</b> <i>the 2<sup>nd</sup> degree of study (Engineer's degree)</i>	
<b>Course prerequisites:</b> <i>completing all compulsory and compulsory optional courses in the curriculum, including course unit code MI-I-P-1 "Engineering Materials"</i>	
<b>Assessment methods:</b> <i>Successful completing of the subject of the state examination</i>	
<b>Learning outcomes of the course unit:</b> <i>The student successfully completes the subject of the state examination</i>	
<b>Course contents:</b> <i>Basic requirement on the selection of engineering materials Engineering textile used for filters Fibres-metallic, ceramic, glass, polymer, textile Coating of textile and fibres Polymer materials acting as reinforcements of composites Viscoelastic materials Cast ceramic materials Materials for food industry Application of engineering materials in biomedicine Characteristics of implants based on their material properties Conditions for application of new materials as replacements of steel Single crystals and their preparation Amorphous materials Metallic glasses</i>	
<b>Recommended references and resources:</b> <i>Janovec, J. a kol.: Perspektivní materiály. Praha: Vydavatelství ČVUT, Praha 2008 Ptáček, L.: Nauka o materiálech. II. Brno: CERM, 1999. Websites and ISO, STN, EN standards. ASM Metals Handbook: Failure analysis and Prevention, Vol. 11, pp. 1039-1071</i>	
<b>Language:</b> <i>Slovak</i>	

<b>Remarks:</b> <i>none</i>					
<b>Evaluation history:</b> <i>Number of classified students : 0</i>					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
<b>Lecturers:</b> <i>prof. Ing. Františka Pešlová, PhD.</i>					
<b>Last modification:</b> <i>31.03.2014</i>					
<b>Supervisor:</b> <i>Prof. Ing. Darina Ondrušová, PhD.</i>					