

## Information sheet for the course Selected Chapters from Rubber Technology

<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-33</i>	<b>Course unit title:</b> <i>Selected Chapters from Rubber Technology</i>
<b>Type of course unit:</b> <i>optional</i>	
<b>Planned types, learning activities and teaching methods:</b> <i>The course of final examination for Master's Degree / 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>The graduation of all compulsory and optional courses from study plan, including the course of MI-I-PV-17C Rubber Technology.</i>	
<b>Assessment methods:</b> <i>Successful graduation of course at final examination for Master's Degree.</i>	
<b>Learning outcomes of the course unit:</b> <i>Student successfully graduates the course at final examination for Master's Degree.</i>	
<b>Course contents:</b> <ol style="list-style-type: none"> <li>1. <i>The composition of rubber blends – characterization, the effect in blend.</i></li> <li>2. <i>The preparation of rubber blends – dispersion and homogenization of components.</i></li> <li>3. <i>Extrusion of rubber blends.</i></li> <li>4. <i>Calendering of rubber blends.</i></li> <li>5. <i>Jacketing of conductors and cables – technology, material composition of blends for jacketing.</i></li> <li>6. <i>Waterproofing of reinforcing materials.</i></li> <li>7. <i>Flooring materials – production technology, material composition of flooring materials.</i></li> <li>8. <i>Tires – distribution, structure, basic types, material composition.</i></li> <li>9. <i>Production technology of tires.</i></li> <li>10. <i>Transport bands – distribution, structure, basic types, material composition, production.</i></li> <li>11. <i>Drive belts – types and structure, production technology.</i></li> <li>12. <i>Hoses – types and structure, material composition, production technology.</i></li> <li>13. <i>Tire-tube and vulcanisation membranes – properties, material composition, production technology.</i></li> <li>14. <i>Technical rubber – distribution, examples of utilization, production methods.</i></li> <li>15. <i>Methods of rubber waste recycling, utilization of rubber brash and reclaim.</i></li> <li>16. <i>Reinforcing materials in rubber products.</i></li> </ol>	
<b>Recommended of required reading:</b> <ol style="list-style-type: none"> <li>1. <i>OLŠOVSKÝ, M.: Kaučuky. Výroba-vlastnosti-použitie. Trenčín: TnUAD, 2012.</i></li> <li>2. <i>OLŠOVSKÝ, M. a kol.: Gumárenské výrobky a výroby. Trenčín: TnUAD, 2004.</i></li> <li>3. <i>PREKOP, Š. a kol.: Gumárska technológia II. Trenčín: GC-tech a TnUAD, 2003.</i></li> <li>4. <i>DUCHÁČEK, V. - HRDLIČKA, Z.: Gumárenské suroviny a jejich zpravovávání. Praha: VŠCHT, 2009.</i></li> </ol>	
<b>Language:</b> <i>Slovak</i>	
<b>Remarks:</b>	
<b>Evaluation history:</b>	

Number of students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
<b>Lecturers:</b> <i>doc. Ing. Petra Skalková, PhD.</i>					
<b>Last modification:</b> <i>31.03.2014</i>					
<b>Supervisor:</b> <i>prof. Ing. Darina Ondrušová, PhD.</i>					