

**Information sheet for the course**  
**Electronic systems in vehicles**

<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>SAOA/B/2-18/d</i>			<b>Course unit title:</b> <i>Electronic systems in vehicles</i>		
<b>Type of course unit:</b> <i>compulsory</i>					
<b>Planned types, learning activities and teaching methods:</b> <i>Lecture 2 hours weekly, seminar 2 hours weekly (on-site method)</i>					
<b>Number of credits:</b> 5					
<b>Recommended semester:</b> <i>5<sup>th</sup> semester in the 3<sup>rd</sup> year (full-time)</i> <i>7<sup>th</sup> semester in the 4<sup>th</sup> year (part-time)</i>					
<b>Degree of study:</b> <i>I. (bachelor)</i>					
<b>Course prerequisites:</b> <i>SAOA/B/1-81/d :The basics of electricity and electronics</i>					
<b>Assessment methods:</b> <i>100 % attendance - seminars, fulfillment of laboratory exercises goals, 60 % attendance – lectures, proving the knowledge of subject content in written and oral examination.</i>					
<b>Learning outcomes of the course unit:</b> <i>Student has a cross-sectional view and knowledge about electronic systems and components of the vehicles.. Furthermore, acquires knowledge and becomes familiar with electronics of the engine, transmission and chassis, safety systems of cars, trucks and motorcycles.</i>					
<b>Course contents:</b> <i>Basic terms. Basic components of the electronic circuits. Logic systems. Batteries, types and their function. AC and DC generators. The types of voltage regulation and electric starters. Ignition systems of gasoline engines and glowing systems of diesel engines. Electronic injection of petrol and diesel engines. Comfort and safety systems. Renewable energy sources and their exploitation in vehicle construction. Communication networks in the vehicles.</i>					
<b>Recommended of required reading:</b> <i>ŽDÁNSKY, B. a kol. : Automobily-Elektrotechnika motorových vozidel, 2. vydání, Nakladatelství AVIS spol. s. r. o., Brno ,2005, ISBN 978 – 80 – 87143 – 05- 6</i> <i>ŠŤASTNÝ, REMEK: Autoelektrika a autoelektronika. Nakl. F. Malina, Praha, 2003. ISBN 80-86293-02-5 - K</i> <i>VLK, F.: Elektronické systémy motorových vozidel 1,2. Nakladelství a vydavatelství František Vlk, Brno, 2002. ISBN 80-238-7282-6</i>					
<b>Language:</b> <i>Slovak</i>					
<b>Remarks:</b>					
<b>Evaluation history</b> <i>Total number of students being evaluated: 116</i>					
A	B	C	D	E	FX
0	6	21,55	18,97	48,28	3,5
<b>Lecturers:</b> <i>Ing. Andrej Lysák, PhD.. – lecturer</i> <i>Ing. Andrej Lysák, PhD. - instructor</i>					
<b>Last modification:</b> <i>15.2.2015</i>					
<b>Supervisor:</b> <i>prof. Ing. Alexej Chovanec, PhD., guarantee of the study program „Vehicles Maintenance and Repair“</i>					