

Information sheet for the course Basics of Robotics

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of special technology</i>					
Course unit code: <i>SaOA/B/1-30/d</i>			Course unit title: <i>Basics of Robotics</i>		
Type of course unit: <i>compulsory</i>					
Planned types, learning activities and teaching methods: <i>2 lecture hours and 2 hours laboratory exercises per week, attendance teaching method.</i>					
Number of credits: <i>5</i>					
Recommended semester: <i>3rd semester in the 2st year (full-time)</i> <i>3th semester in the 2st year (part-time)</i>					
Degree of study: <i>I. (bachelor)</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>100% participation in laboratory sessions, meet the goals set exercises, min. 60% attendance at lectures, properly Term paper, demonstrate knowledge of subject content in written and oral examination. Final evaluation - oral exam.</i>					
Learning outcomes of the course unit: <i>The student has knowledge of cross-field focused on the classification of industrial robots and manipulators (IRaM), basic definitions and concepts, kinematic structure mechanisms IRaM operational area of end members IRaM. process management IRaM end effectors IRaM and inclusion IRaM in production lines.</i>					
Course contents: <i>Classification of industrial robots and manipulators (IRaM). Basic definitions and concepts. Kinematic structure mechanisms IRaM. Operating room terminator IRaM. Methods of management IRaM. End-effectors IRaM. Class IRaM in production lines.</i>					
Recommended of required reading: <i>BARBORÁK, O.: Základy robotizácie – mechanické aspekty robotov a manipulátorov. TnUAD 2009.</i> <i>SKAŘUPA, J.: Průmyslové roboty a manipulátory. VŠB-TU Ostrava 2007.</i> <i>JURIŠICA, L. – HUBINSKÝ, P. – KARDOŠ, J.: Robotika. FEaI – STU Bratislava 2005.</i>					
Language: <i>Slovak</i>					
Remarks: <i>The subject is provided in the winter semester of the second year of full-time study. Compulsory subject.</i>					
Evaluation history: <i>Total number of students being evaluated: 100</i>					
A	B	C	D	E	FX
26,00	43,00	30,00	0	1,00	0
Lecturers: <i>Ing. Milan Jus, PhD. - lecturer and instructor</i>					
Last modification: <i>15.4.2014</i>					
Supervisor: <i>prof. Ing. Alexej Chovanec, PhD., guarantee of the study program “Vehicles Maintenance and Repair”.</i>					