

Information sheet for the course Dependability Vehicles

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of special technology</i>					
Course unit code: <i>SaOA/B/2-16/d</i>			Course unit title: <i>Dependability Vehicles</i>		
Type of course unit: <i>compulsory</i>					
Planned types, learning activities and teaching methods: <i>2 hours of lectures per week, 1 hours of laboratory exercises per week</i>					
Number of credits: 3					
Recommended semester: <i>4th semester in the 2nd year (full-time)</i> <i>5th semester in the 3rd year (part-time)</i>					
Degree of study: <i>I. (bachelor)</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>Continuous written examination two times during the semester. 80 % attendance at lectures, 100% participation in laboratory exercises, processing individual assignments and demonstrate basic skills in written and oral examination.</i>					
Learning outcomes of the course unit: <i>The student will acquire theoretical knowledge about the basics of reliability. They will master the application of the selected deterministic evaluation methods observed variables and indicators of partial properties, processing, use of the information on the reliability of using technology, types of tests and use information. Be familiar with the requirements of standards for reliability, maintainability and Assurance of maintenance.</i>					
Course contents: <i>Introduction to the study. Fundamentals of dependability. Deterministic expressions of partial characteristics observed variables and indicators of dependability and by random variables. Items monitoring, operational reliability, events, conditions, disorders. Renewed and non-renewed objects. Fundamentals of Probability and Statistics. Program management and dependability of its components during the life cycle of the building. Reliability, monitored variables and indicators (PC method, RBD). Maintainability, deterministic monitored variables and indicators. Ensuring the maintenance of monitored variables and indicators. Operability, monitored variables and indicators. Durability. Diagnostics ability. Storability. They monitored variables and indicators. Dependability and human impact on the reliability, quality and safety. Initial information collection and data processing. Dependability tests, reliability and durability. Information system dependability. Use of the results of monitoring and evaluation of dependability in practice.</i>					
Recommended of required reading: <i>E- learning TNUNI AD v Trenčíne</i> <i>FABIAN, S., STRAKA, L.: Teória spoľahlivosti výrobkov a systémov v aplikačných príkladoch. FVT, TU Košice. Prešov 2007. ISBN 978-80-8073-890-7</i> <i>HOLUB R., VINTR. Z.: Spolehlivost letadlové techniky, Elektronická učebnice, Brno, VUT Brno 2001.</i> <i>LIPTÁK, P., STODOLA, J.: Spoľahlivosť strojov a zariadení určených pre špeciálnu techniku. TUAD Trenčín, 2009. ISBN 978-80-8075-418-1</i> <i>STODOLA, J.: Provozní spolehlivost BSV, Vysokoškolská učebnice, UO Brno 2012, ISBN 978-80-7231-861-2</i> <i>Slovenské obranne štandardy</i>					
Language: <i>Slovak</i>					
Remarks:					
Evaluation history: <i>Total number of students being evaluated:</i>					
A	B	C	D	E	FX

Lecturers: <i>prof. Ing. Alexej Chovanec, PhD.</i> <i>Ing. Monika Pilková, PhD.</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>					