# Information sheet for the course Safety of Technical Systems

University: Alexander Dubček University of Trenčín

**Faculty:** Faculty of special technology

Course unit code: UŠMT/I/1-26/d Course unit title: Safety of Technical Systems

**Type of course unit:** *compulsory* 

Planned types, learning activities and teaching methods:

2 hours of lectures per week, laboratory exercises 1 hour per week, semester work

**Number of credits:** 4

**Recommended semester:** *1<sup>st</sup> semester in the 1<sup>st</sup> year (full-time)* 

 $1^{st}$  semester in the  $1^{st}$  year (part-time)

**Degree of study:** *II. (engineer)* 

Course prerequisites: SaOA/B/1-61/d Vehicle design I, SaOA/B/2-17/d Diagnostic of car

#### **Assessment methods:**

Continuous assessment: 100% attendance and active creative work on laboratory exercises, the attainment of goals laboratory practice, mastery of technical terminology, min. 60% attendance at lectures. Twice during the semester written test. The ongoing evaluation is necessary to obtain min. 30 points. Final assessment: Assignment form of a written test with emphasis on theoretical knowledge of the subject and the support of the oral response. In the 30 points is required to evaluate the minimum obtained: (E) - 20 points, (D) - 22 points (C) - 24 points (B) - 26 points (A) - 28 points.

## **Learning outcomes of the course unit:**

The student can analyze the basic provisions of the applicable international and national legal standards in security systems engineering, safety engineering equipment, electronic and cyber fire safety. Furthermore, a comprehensive set of information on constructing technical systems and installations in terms of technical safety, where particular attention is paid to the risk of a method for the reduction in maintenance and repair activities.

#### **Course contents:**

Basic principles and regulations SR and EU legislation focusing on technical safety. Brief description of the laws, rules and regulations applicable to the area of technical safety. Risk assessment work on technical systems, technical equipment and specialty of selected locations and facilities. Specifies safety in the technical equipment. Introduction to electronic and cyber security. Effects of environmental and work on technical safety. Principles of safety tests on test equipment.

## **Recommended of required reading:**

FIŠER, M., LIPTÁK, P., PROCHÁZKA, S., MACKO, M., JOZEFEK, M.: Automatické zbrane.

Merenie a skúšanie. Trenčín, TnU ASD v Trenčíne, 2007. ISBN 80-8075-089-0,

BALÁTĚ, J.: Automatické řízení. Ben Praha 2004. ISBN 80-7300-148-9,

STRNÁD, O.: Systémový prístup k riadeniu informačnej bezpečnosti, Tripsoft Trnava 2008, ISBN 978-80-89291-20-5,

Zákon č. 211/2000 Z. z. o slobodnom prístupe k informáciám a o zmene a doplnení niektorých zákonov,

Vyhláška NBÚ č. 339/2004 o bezpečnosti technických prostriedkov,

Platné zákony a legislatívne nariadenia EU a SR.

Language: Slovak

#### Remarks:

The subject is provided in the winter semester of the first year of full-time study. Subject is required

# **Evaluation history:**

Total number of students being evaluated: 42

A	В	С	D	Е	FX
35,71	14,29	16,67	29,19	7,14	0,00

**Lecturers:** doc. Ing. Peter Lipták, CSc. - lecturer,

Ing. Štefan Pivko, PhD. - instructor

Last modification: 15.4.2014

Supervisor: prof. Ing. Alexej Chovanec, CSc., guarantee of the study program "Maintenance and Repair of Special Mobile Technology"