Information sheet for the course Theory experiment

University: Alexander Dubček University of Trenčín

Faculty: *Faculty of special technology*

Course unit code: *ŠST/I/1-12/d* **Course unit title:** *Theory experiment*

Type of course unit: *optional*

Planned types, learning activities and teaching methods:

1 hours of lectures per week, 1 hour of practice per week and one hour of laboratory exercises per week

Number of credits: 2

Recommended semester: 3rd semester in the 2nd year (full-time)

 3^{rd} semester in the 2^{nd} year (part-time)

Degree of study: *II. (engineer)*

Course prerequisites: *ŠST/B/1-84/d Technical Cybernetics, ŠST/B/1-41/d Special equipment*

Assessment methods:

Continuous assessment: 100% participation and active creative work in laboratory exercises, the fulfilment of the set objectives of the laboratory exercises, the mastery of technical terminology, min. 60% attendance at lectures. Two times during the semester written test. In the interim, it is necessary to get at least 30 points. Final evaluation: Accreditation in the form of a written test, with the emphasis on the theoretical knowledge of the subject and the oral part of the answer. Out of the total 30 points it is needed to evaluate the minimum raise: (E)-20 points, (D)-22 points, (C)-24 points, (B) — 26 points, (and) -28 points.

Learning outcomes of the course unit:

The student has a deep knowledge of the issues and cross-cutting experimental methods and special testing and mobile technology. business logic systems measuring chain, at the time, it is also able to work with the measuring chains as part of the experiments, in order to obtain the preconditions for the practical implementation of the experiments and testing habits in special techniques and practice.

Course contents:

Basic concepts of the theory of experiments, experimental methods and test specification for special measuring equipment and mobile critical parameters. The concept of experiment and its characteristics. Possible errors in planning experiments. Measuring the string as part of the experiment. Elements and blocks of experiments. Codification, certification and verification of the quality of the State for the purpose of mobile technology. Automation of experiments. Methods of evaluation of the experiments.

Recommended reading:

BORŠČ, M., HURTA, F., VITKO, A.: Systémy automatického riadenia. Trenčianska univerzita A.Dubčeka v Trenčíne, 2001

KOZÁK, Š., KAJAN, S.: MATLAB - SIMULINK Č.1. A 2. STU Bratislava, 1999

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

ELIÁŠ, J.: Mobilná technika na kolesových podvozkoch [skriptá]: charakteristiky, technické údaje a popis /. - 1.vyd. - Trenčín: TnU AD, 2002. - 338 s. - ISBN 80-88914-62-0

ELIÁŠ, J.: Špeciálna mobilná technika na pásových podvozkoch [skriptá]: Charakteristiky,

technické údaje a popis / - 1.vyd. - Trenčín: TnUAD FŠT, 2002. - 266 s. - ISBN 80-88914-63-9

Language: Slovak

Remarks:

The course is provided in the winter semester in 2. year of full-time study. The course is elective. **Evaluation:**

Total number of students being evaluated ... divided by notes

А		В	С	D	Е	FX
Lecturers: doc. Ing. Peter Lipták, CSc lecturer						

Last modification: 15.4.2014 Supervisor: prof. Ing. Jiří Balla, CSc., guarantee of the study program "Special Mechanical Engineering Technology".