# Information sheet for the course Technological and product quality

University: Alexander Dubček University of Trenčín

Faculty: Faculty of special technology

Course unit code: STaM/D/3-94/e

Course unit title: Technological and product quality

Type of course unit: compulsory

Planned types, learning activities and teaching methods:
2 hours of lectures / 0 hours exercise per week, part-time training activities.

Number of credits: 5

Recommended semester: recommended in the 2<sup>nd</sup> semester in the 1<sup>st</sup> year

Degree of study: 3nd stage

Course prerequisites: none

**Assessment methods:** During the semester will take place during the course: individual work and final evaluation: examination.

**Learning outcomes of the course unit:** The student will acquire a deep cross knowledge and develop skills in the evaluation of products in terms of quality and technological with possible application in science and research.

### **Course contents:**

Methodology of. Current trends in the design of machinery and equipment. Structural Inheritance - typing, unification and standardization. The selection criteria roughness of machined surface components. Surface integrity. Technological heredity and technological blanks. Enhancing technologies exploitation properties of dynamically loaded components. Criteria mode selector blanks. Geometrical parameters of quality of machine components, variations nominal size, shape and position. Measuring means for measuring the geometric parameters of quality and properties. Measurement of geometric parameters of the machine. components. Analysis of manufacturing and measurement uncertainty. Quality management, quality management system, quality management tools.

## Recommended of required reading:

- [1] BÁTORA, B. VASILKO, K.: Obrobené povrchy monografia. Trenčín, TnU v Trenčíne s Vydavateľstvom GC Tech Ing. Gerši, 2000, 183 s.
- [2] LETKO, I. MEŠKO, J. VRÁBEL, P.: Priemyselné technológie I. Žilina, ZVSI, 2002, ISBN 80-968605-1-8.
- [3] LETKO, I. MEŠKO, J. VRÁBEL, P. PIK, J.: Priemyselné technológie II, Žilina, ZVSI, 2002, ISBN 80-968605-3-4.
- [4] MÁDL, J. VRABEC, M.: Technologičnost konstrukce z hlediska technologie obrábění. Ústí nad Labem, ÚTŘV, UJEP, 2006, 158 s. ISBN 80-7044-757-5.
- [5] HLAVATÝ, I. HRUBÝ, J.: Technologičnost konstrukci, ISBN 978-80-248-2772-8, Ostrava, 2012, 125 s.

Language: Slovak language or German or Russian

### **Remarks:**

Subject is provided only in the winter semester.

## **Evaluation history**

Total number of students being evaluated:

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A	В	С	D	Е	FX

Lecturers: Assoc. prof. Viliam Cibulka, CSc.

Last modification: 15.4.2015

**Supervisor:** prof. Ing. Vojtěch Hrubý, CSc., guarantee of the study program "Technologies and Materials in Mechanical Engineering", Assoc. prof. Ing. Ondrej Híreš, CSc., Assoc. prof. Ing.

*Viliam Cibulka, CSc. – together-guarantors.*