## Information sheet for the course Computer-assisted Technical Drawing II

University: Alexander Dubček University of Trenčín

**Faculty:** Faculty of Industrial Technologies in Púchov

Course unit code: PP-P-10 Course unit title: Computer-assisted Technical

Drawing II

**Type of course unit:** compulsory

## Planned types, learning activities and teaching methods:

Lecture: 2 hours weekly/26 hours per semester of study; face to face Seminar: 2 hours weekly/26 hours per semester of study; face to face

Laboratory tutorial: 2 hours weekly/26 hours per semester of study; face to face

Number of credits: 7

**Recommended semester:** 2<sup>nd</sup> semester in the 1<sup>st</sup> year full-time

3<sup>rd</sup> semester in the 2<sup>nd</sup> year part-time

**Degree of study:** *the 1<sup>st</sup> degree of study (Bachelor's degree)* 

Course prerequisites: PP-P-5 Computer-assisted Technical Drawing I.

Assessment methods: Project work, test

**Learning outcomes of the course unit:** The student can read and technical drawing, knows the rules and principles of engineering drawing, knows the various mechanical engineering components and units, their function (connecting parts, gears, bearings) and can draw them. The student knows technical drawing program Pro / Engineer eventually. Solid Works, as well as the whole kit and their transformation into other software environments for their numerical analysis.

## **Course contents:**

Surface roughness, marking. Tolerating -basic concepts, assembly tolerances and positions,, fit accuracy class, imposition, writing tolerances on drawings. Tolerances-tolerated dimensions, geometric tolerances and position. Bolting and mechanisms. Thread, components for torque transmission. Grooved joints. Bearings. Seals, centering holes, grooves. Mechanical transfers. Welded joints. Spring.

The construction on the computer using Pro / Engineer eventually. Solid Works,

- 1. recapitulate 3D environments Part: Part of depth command EXTRUDE
- 2. The part of the axis of rotation order REVOLVE
- 3. rounding edges order ROUND
- 4. chamfering command CHAMFER
- 5. Drafting menu DRAWING

Creating reports in the menu ASSEMBLY

## **Recommended of required reading:**

MANUAL Solid Works

Mašek, K., Šimůnek, P.: Technické kreslení. SNTL Bratislava, 1962.

Vávra, P.: Strojnické tabulky, SNTL Praha 1984.

Barysz, I., Šulla, J.: Technická dokumentácia v elektrotechnike. (Skriptum). VŠDS Žilina, 1994.

Čillík, L., Barysz, I.: Úvod do konštruovania, návody na cvičenia. (Skriptum). ŽU v Žiline, 1998.

Veselovský, J.: Technické kreslenie. ALFA,SNTL Bratislava, 1986					
Drastík, F.: Technické křeslení podle medzinárodních norem. MONTANEX, s.r.o. Ostrava					
Language: Slovak					
Remarks:					
Evaluation history:					
A	В	С	D	Е	FX
Lecturers: prof. Ing. Ján Vavro, PhD., Ing. Dana Bakošová, PhD. Ing. Petra Kováčiková, PhD.					
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Supervisor: doc. Ing. Ján Vavro, PhD.					