

Information sheet for the course Modern processing technologies

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of special technology</i>	
Course unit code: <i>STaM/D/3-24/d</i>	Course unit title: <i>Modern processing technologies</i>
Type of course unit: <i>optional</i>	
Planned types, learning activities and teaching methods: <i>Lectures - 2 hours weekly, on-site method</i>	
Number of credits: <i>5</i>	
Recommended semester: <i>1st semester in the 1st year</i>	
Degree of study: <i>III.</i>	
Course prerequisites: <i>no</i>	
Assessment methods: <i>Exam consists of a written test and an oral preparation in the scope of the curriculum.</i>	
Learning outcomes of the course unit: <i>Subject doctoral gives a systematic, coherent and comprehensive overview of the knowledge and skills to use modern processing methods for complex utilization of knowledge of material engineering applied to the preparation and processing of metallic and non-metallic materials for all kinds of machine production of pieces and large. The goal is to graduate syllabus proved in practice flexibly solve tasks that use the most advanced technological processes and equipment so that products not only have high performance parameters but also competitive economic indicators. This can be achieved only knowledge and use of the most modern facilities of various disciplines of engineering technology and materials engineering.</i>	
Course contents: <i>The basic outline of the course are the latest industrial technologies applied in various specializations due to technical preparation of production and product prototypes, molds and tools. Another aspect of production flexibility, low energy demands and meet environmental requirements. Such technologies are based on the needs of their programming, perfect management possibilities process simulation and prediction errors of products. Modern processing technologies should take into account the current global trend in various specializations and ensure the production of a product with increased utility parameters. Thus manufactured products must comply with the conditions for certification of their quality</i>	
Recommended of required reading: <i>AMBOS, E.: Urform Technik. Leipzig. ALFA Verlag, 1980.</i> <i>PROKSA, M. a kol.: Materiály a technológia. Príručka. Bratislava STU, 1994, 135 s., ISBN 80-227-0628-0.</i> <i>TURŇA, M. a kol.: Automatizácia zvaracích a zlievárenských procesov, Bratislava, ES SVŠT, 1988, 318 s.</i> <i>MÄSIAR, H. a kol.: Automatizácia zvaracích a zlievárenských procesov, Bratislava, ES SVŠT, 1989, 207 s., ISBN 80-227-0051-7.</i> <i>Hrivňák, I.: Zváranie a zvariteľnosť materiálov, Citadella, Bratislava, 2014.</i>	
Language: <i>Slovak</i>	
Remark: <i>The course is provided in the winter semester of the first year of full-time study. The subject is compulsory optional.</i>	

Evaluation history:*Total number of students assessed: 2*

A	B	C	D	E	FX
50,0	0,0	50,0	0,	0,0	0,0

Lecturers: *Assoc. prof. Ing Harold Mäsiar, CSc.***Last modification:** *15.4.2014***Supervisor:** *prof. Ing. Vojtěch Hrubý, CSc., guarantee of the study program “Technologies and Materials in Mechanical Engineering“, Assoc. prof. Ing. Ondrej Hřeš, CSc., Assoc. prof. Ing. Viliam Cibulka, CSc. – together-guarantors.*

