

Information sheet for the course CNC programming systems

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of special technology</i>					
Course unit code: <i>MŠT/B/3-50/d</i>			Course unit title: <i>CNC programming systems</i>		
Type of course unit: <i>compulsory</i>					
Planned types, learning activities and teaching methods: <i>2 hours of lectures per week, 2 hours laboratory exercises per week, face to face method</i>					
Number of credits: <i>4</i>					
Recommended semester: <i>6th semester in the 3rd year (full-time)</i> <i>6th semester in the 3rd year (part-time)</i>					
Degree of study: <i>I. (bachelor)</i>					
Course prerequisites: <i>MŠT/B/4-55/d Computer Aided Design</i>					
Assessment methods: <i>100% participation in laboratory exercises (without no-show), transfer semestral project min. 50% attendance at lectures, demonstrate knowledge of subject content in written, practical and oral examination.</i>					
Learning outcomes of the course unit: <i>The student will acquire theoretical and practical knowledge of programming CNC systémov control systems and automation of manufacturing systems, computer-aided CAD / CAM CATIA V5. Acquisition of theoretical and practical knowledge of creation and of all levels of programming and production CNC systems.</i>					
Course contents: <i>CNC control systems in mechanical engineering. CAD / CAM systems in the production process. Methods for programming CNC systems. Introduction to Programming CNC production systems at the workshop, and plant operation. Application creation of technological processes and temporal study of the production process with software analytical and graphical support systems FANUC CNC ISO GUIDE FOR FANUC NC (Turning, Milling), HEIDENHAIN iTNC530 (3D Milling) and CATIA V5R20 NC MANUFACTURING (Turning, Milling).</i>					
Recommended of required reading: <i>ŠTULPA, M.: CNC obráběcí stroje a jejich programování. BEN Praha 2006, ISBN 978-80-7300-207-7</i> <i>MAJERÍK, J., ŠANDORA, J.: Nové progresívne nástroje a metódy technológie obrábania. FŠT TnUAD Trenčín 2012, ISBN 978-80-8075-515-7, EAN 9788080755 157.</i> <i>GE FANUC AUTOMATION CNC: MANUAL GUIDE i - Turning, 2007, 125 strán, -1.st edit. GE fanuc Automation CNC Europe S.A. Echternach, Luxembourg.</i> <i>GE FANUC AUTOMATION CNC: MANUAL GUIDE i - Milling, 2007, 125 strán, -1.st edit. GE fanuc Automation CNC Europe S.A. Echternach, Luxembourg.</i> <i>TECHNOCENTRUM CAD - Turning and Milling applications of CATIA V5 NC Manufacturing, 530 strán, 2007, TC CAD Liberec, Czech Republic.</i>					
Language: <i>Slovak, English</i>					
Remarks:					
Evaluation history: <i>Total number of students being evaluated:</i>					
A	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0
Lecturers: <i>doc. Ing. Harold Mäsiar, CSc.</i> <i>Ing. Jozef Majerik, PhD.</i>					

Last modification: 15.4.2014

Supervisor: *Assoc. prof. Ing. Peter Lipták, CSc., guarantee of the study program “Mechanisms in Special Technology”.*