

Information sheet for the course Quality Management

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of special technology</i>	
Course unit code: <i>ŠST/I/2-22/d</i>	Course unit title: <i>Quality Management</i>
Type of course unit: <i>compulsory</i>	
Planned types, learning activities and teaching methods: <i>2 hours lecture / 2 hours exercise per week face to face</i>	
Number of credits: <i>4</i>	
Recommended semester: <i>4th semester in the 2nd year (full-time)</i> <i>5th semester in the 3rd year (part-time)</i>	
Degree of study: <i>II. (engineer)</i>	
Course prerequisites: <i>none</i>	
Assessment methods: <i>During the semester there will be three written review of 10 points, to obtain the user and must be obtained at least 28 points, to obtain user B at least 27 points to score at least 23 points C, D to score at least 20 points and score at least 18 points E . Credit will not be awarded to a student who checks out some written for less than 6 points.</i>	
Learning outcomes of the course unit: <i>Acquisition of basic knowledge, understanding and skills in quality assurance and assessment of engineering products and manufacturing process. Understand the basics of quality management systems, product quality and capability assessment methods of production process, plant and equipment to ensure the required quality of products.</i>	
Course contents: <ol style="list-style-type: none"> <i>1. Basic concepts and their definition according to ISO 9000: 2006 terms and definitions of the quality management system (quality policy, quality objective, quality management and quality assurance).</i> <i>2. Improving the quality and continuous improvement, quality management principles.</i> <i>3. Segments quality from the user's perspective, process quality assessment, quality of service requirements, ingredients, signs and indicators of quality circles quality Spiral quality.</i> <i>4. Quality Planning, Quality Plan, QFD, stages and phases of applying QFD.</i> <i>5. The concept of TQM, The characteristics of TQM, TQM subsystems and principles TQM, TQM Meaning.</i> <i>6. Experience of the application of TQM, EFQM Excellence Model, EFQM Principles, Attributes RADAR methodology.</i> <i>7. Importance of quality costs, cost of quality in user, the social cost of quality, cost of quality from the manufacturer procedure for monitoring the quality costs, classification of quality costs, PAF model.</i> <i>8. Model of life-cycle cost model for processes, Quality Management System (ISO 9001: 2009).</i> <i>9. Quality Management System - Requirements for process approach in organization, continuous improvement, focus on the facts when determining mutual benefits relationships with suppliers, Implementation of quality.</i> <i>10. Statistical methods in quality control - Statistical Process Control, Control Charts, applying statistical process control.</i> <i>11. Statistical Methods in Quality Management - Pareto analysis, Cause and Effect Diagram, Flowchart, correlation diagram.</i> <i>12. Histogram. Statistical acceptance. Check prepackage. Planning experiments.</i> <i>13. Basic techniques of experimentation, experimenting with the process, access to preliminary analysis purposes.</i> 	
Recommended of required reading: <ol style="list-style-type: none"> <i>1. Cibulka, V., Riadenie kvality, TnUAD Trenčín, 2015, v tlači</i> <i>2. Stefanik et al., Quality Management, Alexander Dubcek University in Trencin, 2005, ISBN 80-</i> 	

8075-093-9, 113 p.

2. Balek, J. *Quality management in project preparation*, Alexander Dubcek University Dubcek, 2005, ISBN 80-8075-098-X, 108 p.

3. *ST N EN ISO 9001: Quality Management Systems. Requirements (ISO 9001: 2009)*, Slovak Standards Institute, Bratislava, 2009

4. *EN ISO 9004: Managing for the sustained success of an organization. Based approach Quality Management (ISO 9004: 2009)*, Slovak Standards Institute, Bratislava, 2010

5. *ISO 9000: 2006 Quality management systems Fundamentals and vocabulary*, Slovak Standards Institute, Bratislava, 2006

6. Hutyra, M. et al., *Management quality textbooks*, Ostrava 2007, VSB - Technical University of Ostrava, ISBN 978-80-248-1484-1, 209 p.

7. Nenádál, J. Vykydal D., *Quality Management Systems I, instructional text*, Ostrava 2012, VSB Technical University of Ostrava, ISBN 978-80-248-2586-1, 138 p.

Language: Slovak language or German or Russian

Remarks:

Evaluation history:

Total number of students being evaluated:

A	B	C	D	E	FX

Lecturers: Assoc.prof. Viliam Cibulka, CSc.

Last modification: 12.2.2015

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