

<b>Study program: Industrial Engineering</b>			
<b>Course title: Standardization and Quality Control</b>			
<b>Professor/assistant: MSc.SlađanaNedeljković</b>			
<b>Type of course:</b> compulsory			
<b>ECTS credits: 5</b>			
<b>Pre-requisites: -</b>			
<b>Aims of the course:</b> Prepare a student for: - adopting the terms: standard, standardization, quality systems (QS), - learning about the implementation of standards and TQM, the importance of quality, and new quality standards of products and services; - standardization (ISO 9000, ISO 9001, ISO 9002, ...) - adopting the terms: measuring, checking, measuring accuracy, causes of errors, - teaching methods and measurement procedures with control factors.			
<b>Learning outcomes:</b> After completing the course, students will be able to: - explain the correct choice of standards in industrial production; - apply standards and quality standards of products and services; - apply statistical methods for quality control; - analyze the Quality Assurance System (OK) and statistical methods for quality control; - analyze new and old methods for measuring and controlling the process and controlling the product.			
<b>Syllabus</b>			
<u>Theoretical part</u> Quality management system JUS ISO 9001: 2000. Quality assurance systems. Statistical quality control. Control charts. K charts to analyze the stability data of the production process over the past period. Control charts for controlling production process stability during production. Creating checkpoints. New quality standards. Total quality management. Methods of introducing QMS. Methods for measurement and control. Types of measuring accessories. Accuracy of measurement and causes of faults. Production stability control at the end of a certain period. Stability control of the production process during production. Reliability of production as a system and its functioning. Reliability function. Documentation of quality system. Quality metrology.			
<u>Practical part</u> Video and printed standard application materials. Field visits to manufacturing organizations. Tools and technical measurements. New methods and measuring equipment for process control and product quality. Visits to certain laboratories. Practical exercises in measurement and control.			
<b>Literature</b>			
1. S. Nedeljković, S. Đorđević : <i>Praktikum iz kontrole kvaliteta - prvi deo</i> , Viša tehnička škola, 1995. 2. Ž. Adamović, grupa autora: <i>Standardizacija postupka održavanja</i> , Tehdis, Beograd, 2008. 3. V. Miladinović: <i>Menadžment kvalitetom</i> , VTŠ Beogradska politehnika, 2012. 4. M. Heleta: <i>Menadžment kvalitetom</i> , Univerzitet Singidunum, 2008.			
<b>Number of active classes</b>			Other forms of teaching:
Lectures:30	Practical classes: 30	Research work:	
<b>Teaching methods</b> Combined, interactive with solving practical examples			
<b>Grading system</b> (maximum 100 points), <b>grading scale</b> from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
<b>Pre-exam obligations</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
activity during theoretical lectures	<b>10</b>	written exam	<b>30</b>
practical training	<b>10</b>	oral exam	
colloquium(s)/seminar papers	<b>50</b>		
<b>Sum</b>	<b>70</b>	<b>Sum</b>	<b>70</b>