

Study program / course: Mechanical Engineering				
Type and level of study: Bachelor academic studies				
Course: The Basis of Maintenance				
Lecturers: Jeremić, M. Branislav; Todorović, M. Petar				
Status of course: : Obligatory for module M _I , VI semester				
Number of ECTS: 6				
Precondition: None				
The objective of course Course is configured in a way to introduce students with basics of Maintenance of Technical systems, with the purpose and significance of the maintaining function in modern industrial practice. This is foremost related to: the place, significance and organization of maintaining system depending on type of working activities and company's size, the basic maintaining concepts, maintenance of various types of technical system structural components.				
The outcome of course The students should be able to understand the function of technical system maintenance, the basic principals and terminologies, as same as to be able to understand the basic methods which are used in a field of maintenance. Ability of independent and creative work within the maintenance function in various industrial fields.				
Syllabus Theoretical study The Basics of Technical System Maintenance; The Bases of Technical System Maintenance Troubleshooting; Characteristics and Condition of the Technical Systems; Maintenance and Efficiency of Technical Systems; Basic Maintenance Methods; Unplanned (Corrective), Planned (time based and condition based maintenance), Concept of Technical Diagnostic, Modern Maintenance Methods; Maintenance of mechanical, hydraulic and pneumatic components and systems.				
Recommended reading 1. Jeremić B., Terotehnologija: tehnologija održavanja tehničkih sistema, Eskod, 1992. 2. Jeremić B., The Bases of Maintenance, script				
The number of hours of active teaching:				Other classes: 1
Theory: 3	Practical classes: 1.6	Other forms of teaching: 0.4	Research study: 0	
Methods of teaching Teaching is performed through out lectures, auditorium and laboratory exercises. For teaching presentation a modern teaching facilities-video presentation are used. For each teaching field a variety of different industrial field examples are taken in consideration through different case studies and also possible states of technical systems are also considered. For examination performing a modern training equipment from the field of hydraulic and pneumatic (FESTO) is used, as same as some other measuring equipment and software.				
Evaluation of knowledge				
Pre-final exam obligations	points	Final exam	points	
Activities during the classes:	10			
Practical classes:	10	Verbal exam	30	
Colloquiums(s) :	35			
Seminar(s) :	15			