

Study program / course: Mechanical Engineering			
Type and level of study: Basic academic studies			
Course: Machine Elements			
Lecturers: Slobodan Tanasijević, Đorđević Zorica, Blagojević Mirko			
Status of course: Obligatory, joint for all modules, III semester			
Number of ECTS:7			
Precondition: Mechanics I, Technical drawing with computer graphics, Strength of materials			
The objective of course Machine elements are the constitutive elements of all machines and devices. The aim of this subject is introducing of students with theoretical basics, applications, operating, calculation, constructional shapes and selection of standard elements according defined conditions. In this subject students will detail learn about kinematic parameters, and a little about dynamic of machine elements. The subject Machine Elements contains learning about real constructions with using theoretical knowledge.			
The outcome of course Basic knowledge about construction, calculation and verifying of machine elements and selection of standard components.			
Syllabus			
Theoretical study Introduction. Standardization of machine elements. Tolerances of machine elements and assembly. Basic calculations of machine elements. Screw connections. Elastic connections. Gears. Frictional gear. Belt gear. Chain gear. Shafts and spindles. Connection of shafts and rotary parts. Rolling and sliding bearings. Clutches and brakes.			
Practical classes Solving of practical problems, instructions for homework and their verifying. The homework are from next areas: screw connections, gears and shafts.			
Recommended reading 1.Nikolić V.: Machine Elements, Theory, Calculations, Examples, Faculty of Mechanical Engineering, Kragujevac, 2004 2. Nikolić V.: Machine Elements, Theory and Examples, Faculty of Mechanical Engineering, Kragujevac, 1995 3. Miltenović V.: Machine Elements, Faculty of Mechanical Engineering, Niš, 2004 4. Ognjanović M.: Machine Elements, Faculty of Mechanical Engineering, Beograd, 2003			
The number of hours of active teaching:			Other classes:1
Theory: 2	Practical classes: 1	Other forms of teaching: 2	
Research study:0			
Methods of teaching Lectures, exercises, individual homework, tests and final test. Through lectures, students get basic information about theoretical basics, while through exercises the students solving the practical problems.			
Evaluation of knowledge			
Pre-final exam obligations	points	Final exam	points
Activities during the classes:	2	written exam	34
Practical classes:	4		
Colloquiums(s) :	33		
Seminar(s) :	27		