Study Programme: Agricultural Engineering And Information Systems	
Course Unit Title: Machine elements	
Course Unit Code: 19.PTI004	
Name of Lecturer(s): Associate professor Milivoj Radojčin, assistant Krstan Kešelj	
Type and Level of Studies: Undergraduate studies	
Course Status (compulsory/elective): Compulsory	
Semester (winter/summer): Winter	
Language of instruction: English	
Mode of course unit delivery (face-to-face/distance learning): face-to-face	
Number of ECTS Allocated: 6	
Prerequisites: None	

Course Aims:

The aim of the course is that students learn: the role, function, structural shapes, materials and calculation in order to select or verify the basic machine elements.

Learning Outcomes:

Students will have the necessary knowledge of machine elements and will be able to more accurately, more reliable and more efficient to select, use and maintain machines. After passing the course, students will be able to monitor and study other subjects

Syllabus:

Theory lessons

Analyzed machine elements: elements for the connection: bolts, springs, pins, fuses and welded forms; Shafts and pins; Gear, chain, belt and gearing forces. Variates; Beds; Couplings (rigid, elastic, expansion, on - off, joint, special and security. For all of these structural elements will analyze the following aspects: Application, roles and division; loads and stresses; standard label; Basic parameters and indicators of work; Calculation of in order to select or check the selected standard types, monitoring and verification work during use; Tests during operation in order to determine the useful life period of replacement, types of damage, maintenance and protection procedures in order to long life and protection measures for the security of use.

Practical teaching: Exercise, Other modes of teaching, Study research work

Calculation tasks in the area covered by the lectures. Independent production of graphic works. View and defense graphic works.

Required Reading:		
Weekly Contact Hours:	**Lectures: 3**	**Practical work: 3**

Teaching Methods:

The method of oral presentations and discussions. Method of presentations, demonstrations, simulations and illustrations on the board and using the computer. Method simulation work using computers. The method of practical work (computation and computational methods).

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points

Active class participation	5	written exam	36
Practical work		oral exam	60
Preliminary exam(s)		…….	
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			