

## **UNIVERSITY OF NIŠ**

Course Unit Descriptor	aculty	Faculty of Mechanical Engineering		
GENERAL INFORMATION				
Study program		Mechanical Engineering		
Study Module (if applicable)		-		
Course title		Mechatronic system design		
Level of study	⊠Bache	⊠Bachelor □ Master's □Doctoral		
Type of course		□ Obligatory ⊠ Elective		
Semester	🗆 Autur	□ Autumn		
Year of study		IV		
Number of ECTS allocated	6	6		
Name of lecturer/lecturers	Petrović	Petrović B. Tomislav		
Teaching mode	⊠Labor	⊠ Lectures ⊠ Group tutorials □ Individual tutorials   ⊠ Laboratory work ⊠ Project work □ Seminar   □ Distance learning □ Blended learning □ Other		
PURPOSE AND OVERVIEW (max. 5 sentences)				
Introducing methods for mechatronic system design and development. Introducing methods for mechatronic system optimization. Training for the design of mechatronic systems and team work in the field of development of mechatronic systems.				
SYLLABUS (brief outline and summary of topics, max. 10 sentences)				
Basics of the development and design of mechatronic systems. Process of mechatronic system design and development. Environment, function and structure of mechatronic system Methods for mechatronic system design and development Methods for selection of optimal mechatronic system design Methods for accuracy and reliability enhancement of mechatronic system Safety issues for mechatronic systems Analysis of developed mechatronic systems				

LANGUAGE OF INSTRUCTION					
Serbian (complete course)	) 🗌 English (	(complete course)	(complete course)		
Serbian with English mentoring Serbian with German mentoring					
ASSESSMENT METHODS AND CRITERIA					
Pre exam duties	Points	Final exam	points		
Activity during lectures	10	Written examination	0		
Practical teaching	10	Oral examination	30		
Teaching colloquia	50	OVERALL SUM	100		
*Final examination mark is formed in accordance with the Institutional documents					