

## **UNIVERSITY OF NIŠ**

Course Unit Descriptor Fac	culty			
GENERAL INFORMATION				
Study program	Mechatronics and Control			
Study Module (if applicable)	-			
Course title	MM.1.4-I.2-1 Digital Image Processing in Mechatronics			
Level of study	Bachelor 🗹 Master's 🗆 Doctoral			
Type of course	□ Obligatory			
Semester	Autumn 🗆 Spring			
Year of study	1			
Number of ECTS allocated	6			
Name of lecturer/lecturers	Aca D. Micic			
Teaching mode	∠ Lectures □ Group tutorials □ Individual tutorials     Laboratory work □ Project work □ Seminar     Distance learning □ Blended learning □ Other			
PURPOSE AND OVERVIEW (max. 5 sentences)				
Use of and mastering the basic techniques of digital image processing. Management of mechatronic processes. Mastering software agents for monitoring and process control.				
SYLLABUS (brief outline and summary of topics, max. 10 sentences)				
<ul> <li>Introduction to digital image processing.</li> <li>The formation and presentation of images.</li> <li>Transformation of the picture.</li> <li>Restoration image, detecting edges.</li> <li>Analysis of texture and pattern recognition in the image.</li> <li>Analysis of dynamic scenes.</li> <li>Measuring the dimensions of movable and immovable objects.</li> <li>Design of image processing ipraćenja process.</li> </ul>				
LANGUAGE OF INSTRUCTION				

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