



# UNIVERSITY OF NIŠ

**Course Unit Descriptor**

**Faculty**

Faculty of Mechanical Engineering

## GENERAL INFORMATION

Study Program	<b>Mechanical Engineering</b>		
Study Module (if applicable)	-		
Course Title	Systems Control		
Level of Study	<input type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input checked="" type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input type="checkbox"/> Autumn	<input checked="" type="checkbox"/> Spring	
Year of Study	I		
Number of ECTS Allocated	10		
Name of Lecturer/Lecturers	Vlastimir Nikolić, Žarko Čojbašić		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input checked="" type="checkbox"/> Laboratory work	<input checked="" type="checkbox"/> Project work	<input checked="" type="checkbox"/> Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> Other

## Purpose and Overview (max. 5 sentences)

*Introduction of students to basic principles of analysis and application of components of automatic control systems for the purpose of contemporary industrial control systems design. Allow students to get insight into contemporary methods of analysis and design of control systems, from the viewpoint of selection of proper components.*

## Syllabus (brief outline and summary of topics, max. 10 sentences)

**Theory** \* Control loop and its components. Control objects. \* Measuring elements – sensors. \* Converters. Actuators. Compensators and controllers. \* Components of digital control systems. Power supplies. \* Examples of implemented systems.

**Guided independent research** \* Preparation of students for independent research into the written literature, scientific journals, and web portals within the field of components of automatic control systems.

## 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	0	Written Examination (2 term papers)	50

<b>Practical Teaching</b>	<b>0</b>	<b>Oral Examination</b>	<b>50</b>
<b>Teaching Colloquia</b>	<b>0</b>	<b>Overall Sum</b>	<b>100</b>

**\*Final examination mark is formed in accordance with the Institutional documents**