



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

GENERAL INFORMATION

Study program	BASIC ACADEMIC STUDIES Mechanical engineering
Study Module (if applicable)	
Course title	B.6.3-E.9-5 Electrical and Electronic Component in Mechatronic
Level of study	<input checked="" type="checkbox"/> Bachelor <input type="checkbox"/> Master's <input 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	III
Number of ECTS allocated	6
Name of lecturer/lecturers	Aca D. Micic
Teaching mode	<input checked="" type="checkbox"/> Lectures <input type="checkbox"/> Group tutorials <input type="checkbox"/> Individual tutorials <input type="checkbox"/> Laboratory work <input type="checkbox"/> Project work <input type="checkbox"/> Seminar <input type="checkbox"/> Distance learning <input type="checkbox"/> Blended learning <input type="checkbox"/> Other

PURPOSE AND OVERVIEW (max. 5 sentences)

Program course is designed so that all students in the field of mechatronics familiar with the basic characteristics of basic electromechanical and electronic components. Students acquire knowledge on the basis of which they can use basic Electromechanics and electronic components and design simpler applications. Students are trained to use software packages for the simulation of electronic circuits

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

- Basic concepts and definitions
- Resistors
- Capacitors
- The coils and reactors
- PN junction, semiconductor diodes
- Thyristors, transistors,

- Types of transistors
- Kola with transistors
- Fet, circuits with FETs
- Operational amplifier
- AD and DA converters logic
- Digital circuits and microprocessors

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	5	Written examination	0
Practical teaching		Oral examination	45
Teaching colloquia	15+15+15	OVERALL SUM	100

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