

## Specification for the book of courses

<b>Study program</b>		Electrical Engineering and Computer Science		
<b>Module</b>		Electron Devices and Microsystems		
<b>Type and level of studies</b>		Undergraduate Academic Studies		
<b>The name of the course</b>		Virtual Instrumentation		
<b>Lecturer (for lectures)</b>		Pejović M. Milić		
<b>Lecturer/associate (for exercises)</b>		Pejović M. Milić		
<b>Lecturer/associate (for OFE)</b>				
<b>Number of ECTS</b>	2	<b>Course status (obligatory/elective)</b>	Elective	
<b>Prerequisites</b>				
<b>Course objectives</b>	Basic concepts of virtual instrumentation. Interfacing between virtual instrumentation and laboratory instruments.			
<b>Course outcomes</b>	Individual design and implementation of virtual instrumentation. VisualStudio development environment for realisation of virtual instrumentation as backup to various laboratory equipment.			
<b>Course outline</b>				
<b>Theoretical teaching</b>	Theoretical lectures takes place in laboratory. Introduction to development systems and various types of measurement and communication equipment. Design of virtual instrumentation as software backup of mentioned equipment.			
<b>Practical teaching (exercises, OFE, study and research)</b>	Practical lectures takes place in laboratory. Introduction to development systems and various types of measurement and communication equipment. Design of virtual instrumentation as software backup of mentioned equipment.			
<b>Textbooks/references</b>				
1	Michael McMillan, „Data structures and algorithms using C#“			
2	Model KUSB-488A USB to GPIB Converter, datasheet			
3	Datasheet for various devices used in virtual instrumentation design			
4				
5				
<b>Number of classes of active education per week during semester/trimester/year</b>				
<b>Lectures</b>	<b>Exercises</b>	<b>OFE</b>	<b>Study and research work</b>	<b>Other classes</b>
1	1	0	0	0
<b>Teaching methods</b>	Teaching takes place in laboratory through various projects.			
<b>Grade (maximum number of points 100)</b>				
<b>Pre-exam duties</b>	<b>Points</b>	<b>Final exam</b>	<b>Points</b>	
<b>Activity during lectures</b>	20	<b>Written exam</b>	15	
<b>Exercises</b>	50	<b>Oral exam</b>	15	
<b>Colloquia</b>				
<b>Projects</b>				