

## Specification for the book of courses

<b>Study program</b>		Computing and Informatics		
<b>Module</b>		Information Systems and Technologies		
<b>Type and level of studies</b>		Master studies		
<b>The name of the course</b>		Fuzzy Logic		
<b>Lecturer (for lectures)</b>		Radmanović M. Miloš		
<b>Lecturer/associate (for exercises)</b>		Radmanović M. Miloš		
<b>Lecturer/associate (for OFE)</b>				
<b>Number of ECTS</b>		4	<b>Course status (obligatory/elective)</b>	Elective
<b>Prerequisites</b>				
<b>Course objectives</b>		Students should acquire fundamentals of Fuzzy Logic and its applications in computing, automatic control and related areas.		
<b>Course outcomes</b>		At the end of this course students should know what are Fuzzy systems, what are their characteristics, descriptions methods and implementation techniques. Students should learn how to implement simple Fuzzy systems.		
<b>Course outline</b>				
<b>Theoretical teaching</b>		Introduction, evolution from classical to Fuzzy logic, types of predicates. T-norms, t-conorms and negations. Fuzzy subsets. Logic consistency and inconsistency in F (E). Linguistic modifiers. Possibility measures. Aggregation functions. Fuzzy implications. Compositional Rule of Inference. Fuzzy quantifiers. Fuzzy reasoning. An Introduction to Fuzzy Control		
<b>Practical teaching (exercises, OFE, study and research)</b>		Seminars and project related to the application of Fuzzy logic.		
<b>Textbooks/references</b>				
1	M. Mukaidono, Fuzzy Logic for Beginners, World Scientific, 2001.			
2	Documents on Web site: Moraga. C., et all. Intorduction to Fuzzy Logic, video lectures.			
3	Documents on Web site: <a href="http://cs.elfak.ni.ac.rs/nastava/">http://cs.elfak.ni.ac.rs/nastava/</a>			
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>
2	1	0		
<b>Teaching methods</b>		Self studing by use of video lectures on the Internet.		
<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>			<b>Written exam</b>	
<b>Exercises</b>			<b>Oral exam</b>	40
<b>Colloquia</b>				
<b>Projects</b>		60		