

## Specification for the book of courses

<b>Study program</b>		Electrical Engineering and Computer Science		
<b>Module</b>		Common		
<b>Type and level of studies</b>		Doctoral studies		
<b>The name of the course</b>		Statistics		
<b>Lecturer (for lectures)</b>		Milošević M. Dušan		
<b>Lecturer/associate (for exercises)</b>				
<b>Lecturer/associate (for OFE)</b>				
<b>Number of ECTS</b>	10	<b>Course status (obligatory/elective)</b>	Elective	
<b>Prerequisites</b>				
<b>Course</b>	Mastering basic knowledge of statistics and work in the SPSS package.			
<b>Course outcomes</b>	Acquiring theoretical knowledge and practical skills.			
<b>Course outline</b>				
<b>Theoretical teaching</b>	Statistical methodology. Descriptive analysis. Arranging and displaying data. Descriptive measures. Measures of central tendency and dispersion. Distribution of discrete and continuous random variables. Sample and sample statistics. Statistical testing methods. Hypothesis testing. T-test, Analysis of variance with one and two factors. Pearson's chi-squared test. Simple linear regression and correlation. Multiple regression and correlation. Factor analysis. Taxonomic analysis. Discrimination analysis. Non-parametric methods. Index numbers, Analysis of time series. Working in the SPSS program package.			
<b>Practical teaching (exercises, OFE, study and research)</b>				
<b>Textbooks/references</b>				
1	H. J. Seltman, Experimental Design and Analysis, Online at: <a href="http://www.stat.cmu.edu/hselman/309/Book/Book.pdf">http://www.stat.cmu.edu/hselman/309/Book/Book.pdf</a> , 2018.			
2	A. Abebe, J. Daniels, J. W. McKean, J. A. Kapenga, Statistics and Data Analysis, Statistical Computation Lab (SCL) Western Michigan University, Kalamazoo, MI.			
3	M. Žižić, M. Lovrić, D. Pavličić, Methods of statistical analysis (in Serbian), Faculty of Economics, University of Belgrade, 2007,			
4	J. Pallant, SPSS Survival Manual, sixth edition, Open University Press 2016.			
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>
3	0	0	0	0
<b>Teaching methods</b>	Lectures, computer exercises, consultation, preparation of seminar work.			
<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>	10	<b>Written exam</b>		
<b>Exercises</b>		<b>Oral exam</b>	30	
<b>Colloquia</b>	30			
<b>Projects</b>	30			