

Study program: Road Traffic Engineering			
Course title: Statistical Research			
Professor: Olga Miljković			
Status: Compulsory			
ECTS credits: 6			
Prerequisites: none			
Aims of the course: The students gain knowledge about the methodology of statistical research; they are taught to use various statistical software in different phases of planning, designing and realizing researches.			
Learning outcomes: After successful completion of the course, students will understand main problems in dealing with the statistical data, they will be able to participate in quantitative research and take part in planning and implementation. The students will know how to solve actual problems in data analysis, choose the appropriate method for statistical analysis, and interpret, present and use the obtained results.			
Syllabus: Quantitative research process. Data sources. Types of data. Variables. Measurement scales. Measuring, measuring instruments and errors. Choice of the variables. Population. Sample, sample size and error assessment. A simple random sample, stratified sample, the choice of sample elements in practical work (fieldwork). Methods of data collection. Traditional types of surveys, their advantages and disadvantages. How the use of computer technology affects data collecting methods. Total survey error. Non-response, Unit non-response, Item non-response. Questionnaire design. Data preparation. Coding. Data entering. Data preprocessing. Data weighting. Data analysis. Making reports and presenting the results.			
Literature M. Paskota, Osnove kvantitativnih istraživanja, Saobraćajni fakultet, Beograd, 2007.			
Total number of active classes: 5		Lectures: 3	Practical classes: 2
Teaching methods: Lectures and auditory exercises.			
Grading system (maximum 100 points) grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51- 60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91- 100 points			
Pre-exam obligations:	Points:	Final exam:	Points:
Activity during lectures	max 10	Written exam	50
Practical training	max 10		
Written test(s)	max 30		
Minimum requirement for the final exam	30		