

Study Programme: Civil Engineering			
Course Unit Title: Road Network Management			
Course Unit Code: GP501			
Name of Lecturer(s): Radović Nebojša			
Type and Level of Studies: master			
Course Status (compulsory/elective): elective			
Semester (winter/ summer): winter			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 3			
Prerequisites: none			
Course Aims: Enabling students to acquire professional knowledge and application in practice.			
Learning Outcomes: Students are competent to utilize the obtained knowledge in professional work.			
Syllabus. Introduction, tasks and objectives of the system for road management, basic hypotheses. Short recapitulation of the content from the course “Structure Management with the Application of Information Systems” (7th semester). System structure, functions, analysis levels. Data used: traffic network, vehicles, road work, traffic load, ambient conditions, economic indexes, etc. Information systems as a basis of a management system – database on roads, bridges and traffic, methods and devices for data acquisition. Defining the traffic network condition with a special emphasis on damages and their development. Forecast models for predicting pavement alteration conditions. Maintenance and effects, alternative maintenance strategies. World Bank model HDM-4 for developing and managing traffic networks.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours:2	Lectures: 2	Practical work: 2	
Teaching Methods: Lectures, auditory and computer practice.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Attendance			
Computer exercises			
Tests (4x)			

