

Course Unit Descriptor

Study Programme: Power, Electronic and Telecommunication Engineering (Telecommunication Systems)			
Course Unit Title: Mobile Communications			
Course Unit Code: EK541			
Name of Lecturer(s): Milan Narandžić			
Type and Level of Studies: Master Academic Degree			
Course Status (compulsory/elective): compulsory			
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: 4			
Prerequisites: none			
Course Aims: Becoming familiar with the concepts of advanced techniques of signal transmission and processing in a mobile radio environment.			
Learning Outcomes: Theoretical knowledge, the use of programme simulations.			
Syllabus: Selective fading and multiple propagation. LTV radio-channel model. The concept of RAKE receivers. Combining of diversity signals. Smart antennas. MIMO systems. The estimation and equalization of radio-channels. The space-time coding. Elements of the software radio.			
Required Reading: Relevant literature in English TBD			
Weekly Contact Hours: 4		Lectures: 2	Practical work: 2
Teaching Methods: Lectures. Auditory, computer and laboratory practice; homework, a colloquium, the examination.			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Laboratory exercise attendance	20	Written part of the exam	70
Homework	10		
Colloquium exam	35		
Test	10		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			