

## Specification for the book of courses

<b>Study program</b>		Electrical Power Engineering		
<b>Module</b>		Electrical Power Engineering		
<b>Type and level of studies</b>		Master studies		
<b>The name of the course</b>		Electricity Market and Deregulation		
<b>Lecturer (for lectures)</b>		Tasić S. Dragan, Janjić D. Aleksandar		
<b>Lecturer/associate (for exercises)</b>		Vučković D. Dragan		
<b>Lecturer/associate (for OFE)</b>				
<b>Number of ECTS</b>	5	<b>Course status (obligatory/elective)</b>	Elective	
<b>Prerequisites</b>				
<b>Course objectives</b>	Introduction to the basic knowledge about the principles of regulated and deregulated electricity market and basic market models.			
<b>Course outcomes</b>	Upon completion of this course, students will know a modern organization and functioning of the deregulated electric power industry in the world, as well as the organization and operation of electric power in Serbia. There will also be trained in making power balancer, work on power exchange, working in the control center, the work of the independent system operator, the regulatory agency, the development of optimal solutions for a variety of markets and time periods, etc.			
<b>Course outline</b>				
<b>Theoretical teaching</b>	The basic structure and regulation of the electric power industry, the causes and motives of deregulation, the principles of electric power industry restructuring and deregulation. Deregulation and restructuring of the electric power industry, technical and economic conditions and participants. The experience of deregulation in the world, the EU regulations on the electricity market. Regulation and deregulation in the state of Serbia. The organization and functioning of the electricity market. Bilateral market, central, and mixed market balance. Principles of regulation of monopoly networks and operating costs. Electricity transit. Transmission network congestion. The main regulatory models			
<b>Practical teaching (exercises, OFE, study and research)</b>	Practical work with systems for the power market simulation. Composing of electrical energy balances Simulation of a certain market model and optimization of market functions, using the appropriate software packages.			
<b>Textbooks/references</b>				
1	N. Katic, A. Tausan, M. Adamovic, "Power systems under the deregulated market conditions", (in Serbian) FTN Novi Sad, 2012.			
2	J. Momoh, L. Mili, Economic Market Design and Planning for Electric Power Systems, IEEE, John Wiley & Sons, 2010.			
3	H.L.Willis, L. Philips, Understanding Electric Utilities and Deregulation, Taylor & Francis, 2006			
4	D. Kirschen, G. Strbac, Fundamentals of Power System Economics, John Wiley and Sons, 2004, USA			
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	2	0		
<b>Teaching methods</b>	Lectures, exercises, seminary work, consultations.			
<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>	5	<b>Written exam</b>	20	
<b>Exercises</b>		<b>Oral exam</b>	20	
<b>Colloquia</b>				
<b>Projects</b>	55			