Specification for the book of courses

Study program			Electrical Engineering and Computer Science	
Module			Communications and Information Technologies - Communications and Information Processing	
Type and level of studies			Undergraduate Academic Studies	
The name of the course			Broadband Telecommunications	
Lecturer (for lectures)			Milović M. Daniela, Milić N. Dejan	
Lecturer/associate (for exercises)			Panajotović S. Aleksandra	
Lecturer/associate (for OFE)			Panajotović S. Aleksandra	
Number of ECTS	5	**Course status (obligatory/elective)**		Elective
Prerequisites				
Course objectives	Students will gain the necessary knowledge about the principles of managing the fixed and mobile broadband networks.			
Course outcomes	Acquiring experience in modeling, analysis and design of broadband communication networks.			
Course outline				
Theoretical teaching	Broadband Network Architecture. Packet core network. Physical layer technologies, data layers, link layers, and network layer. Mechanisms for achieving the quality of service in broadband networks. Models of integrated and differential services. Traffic management in broadband networks. Software-defined networks, OpenFlow.			
Practical teaching (exercises, OFE, study and research	Solving practical problems in broadband networks.			
Textbooks/references				
1	Broadband Access: Wireline and Wireless - Alternatives for Internet Services, S. Gorshe, A. R. Raghvan, T. Starr, S. Galli, Wiley, 2014			
2	Core and Metro Networks, A. Stavdas, Wiley, 2010			
3	Network Innovation through OpenFlow and SDN: Principles and Design, F. Hu, CRC Press, 2014			
4				
5				

Number of classes of active education per week during semester/trimester/year				
Lectures	**Exercises**	**OFE**	**Study and research work**	**Other classes**
2	2	1	0	0
Teaching methods	Lectures, auditory exercises, homeworks, office hours.			

Grade (maximum number of points 100)			
Pre-exam duties	**Points**	**Final exam**	**Points**
Activity during lectures	10	**Written exam**	25
Exercises	20	**Oral exam**	25
Colloquia			
Projects	20		