Specification for the book of courses

Study program	Electrical Engineering and Computer Science		
Module	Electronics - Multimedia technologies		
Type and level of studies	Undergraduate Academic Studies		
The name of the course	Digital Image Processing		
Lecturer (for lectures)	Nikolić V. Saša		
Lecturer/associate (for exercises)	Cvetković S. Stevica		
Lecturer/associate (for OFE)	Cvetković S. Stevica		
Number of ECTS	5	**Course status (obligatory/elective)**	Obligatory
Prerequisites			
Course objectives	Present the basic algorithms for digital image processing: image enhacement, sharpening, filtering, segmentation, etc.. Present the mathematical knowledge for operation in digital image processing. Software implementation of presented algorithms in Matlab.		
Course outcomes	To enable students to understand and implement independently the basic operations of digital image processing in MATLAB.		
Course outline			
Theoretical teaching	Components of the image processing system. Photometry, acquisition and digitalization of the image. Image enhancement in the spatial domain. Image enhancement in the frequency domain. Image restoration. Color image processing. Morphological image processing. Image segmentation.		
Practical teaching (exercises, OFE, study and research	Exercises on the computer in MATLAB. Practical implementation of the program of digital image processing algorithms that are presented in class.		
Textbooks/references			
1	Rafael C. Gonzalez, Richard E. Woods, Digital Image Processing, 3rd edition, Prentice-Hall, 2008.		
2			
3			
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	Предавања, лабораторијске вежбе, индивидуални пројекти.			

Grade (maximum number of points 100)			
Pre-exam duties	**Points**	**Final exam**	**Points**
Activity during lectures	5	**Written exam**	30
Exercises	5	**Oral exam**	30
Colloquia	20		
Projects	10		