Specification for the book of courses

Study program	Electrical Engineering and Computer Science	
Module	Common	
Type and level of studies	Doctoral studies	
The name of the course	Digital Control Techniques	
Lecturer (for lectures)	Veselić R. Boban	
Lecturer/associate (for exercises)		
Lecturer/associate (for OFE)		
Number of ECTS	10 **Course status (obligatory/elective)**	Elective
Prerequisites		
Course objectives	Mastering the content that is related to the techniques of digital control. Training the students for active literature monitoring and scientific research in the field of digital control systems.	
Course outcomes	Ability of critical analysis of existing solutions and finding original solutions on selected topics in the theory of digital control systems.	
Course outline		
Theoretical teaching	Modern theory of digital control systems. Sampling in digital signal processing and digital control theory. Uniform approach to the analysis and synthesis of digital control systems. Some elements of analysis and synthesis of nonlinear digital control systems.	
Practical teaching (exercises, OFE, study and research		

Textbooks/references

1	R. H. Middleton, G.C. Goodwin, Digital Control and Estimation: A Unified Approach, Englewood Cliffs, N.J.: Prentice-Hall, 1990.	
2	A. Feuer and G. C. Goodwin, Sampling in Digital Signal Processing and Control, Boston: Birkhäuser, 1996.	
3		
4		
5		

Number of classes of active education per week during semester/trimester/year

Lectures	Exercises	OFE	Study and research work	Other classes
3	0	0	0	0

Teaching methods	Lectures/consultations (depending on the number of students); study and research work (insight into literature, problem analysis, finding solutions, writing and presentations of individual paper)

Grade (maximum number of points 100)

Pre-exam duties	Points	Final exam	Points
Activity during lectures	0	**Written exam**	0
Exercises	0	**Oral exam**	50
Colloquia	0		
Projects	50		