

Specification for the book of courses

Study program	Electronics and Microsystems			
Module	Electronics and Microsystems			
Type and level of studies	Master studies			
The name of the course	Metodology in Verification			
Lecturer (for lectures)	Dimitrijević A. Marko, Andrejević-Stošović V. Miona			
Lecturer/associate (for exercises)				
Lecturer/associate (for OFE)	Dimitrijević A. Marko, Andrejević-Stošović V. Miona			
Number of ECTS	5	Course status (obligatory/elective)	Elective	
Prerequisites				
Course objectives	Systematization of knowledge from functional verification and mastering verification methodologies: e Reuse Methodology (eRM) and Universal Verification Methodology (UVM).			
Course outcomes	Acquiring knowledge and competence for applying standard methodologies (eRM and UVM) in functional verification.			
Course outline				
Theoretical teaching	Basics of e Reuse Methodology (eRM). Fundamentals of Universal Verification Methodology (UVM). Phases of the UVM methodology. Classes in UVM methodology. UVM macros. Verification component parts – environment, tests, test agent, agent, driver, sequencer, monitor, sequences, scoreboard, BFM (Bus Functional Model), synchronizer. Realization of the verification component.			
Practical teaching (exercises, OFE, study and research)	Verification component design in the UVM methodology for: <ol style="list-style-type: none"> 1. FIFO register, 2. Serial protocol (I2C, SPI, UART), 3. Parallel (bus) protocol. 			
Textbooks/references				
1	Cadence, "Universal Verification Methodology (UVM) e User Guide", 2015.			
2	S. Iman, S. Joshi, The e hardware verification language, Kluwer Academic Publishers, New York, 2004.			
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	0	2		
Teaching methods	Lectures, laboratory work, consultations, project			
Grade (maximum number of points 100)				
Pre-exam duties	Points	Final exam	Points	
Activity during lectures	25	Written exam		
Exercises	25	Oral exam	50	
Colloquia				
Projects				